CDX-GT420U/GT424U/GT427UE
GT470U/GT470US

SERVICE MANUAL

Ver. 1.1 2008.01

US Model
CDX-GT420U
AEP Model
UK Model
CDX-GT420U/GT424U
E Model
CDX-GT470U/GT470US
Russian Model
CDX-GT420U/GT427UE

(Photo: CDX-GT424U)

- The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-101I-188//Q
Optical Pick-up Name	DAX-25A

AUDIO POWER SPECIFICATIONS
(CDX-GT420U: US model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

SPECIFICATIONS

CD Player section
Signal-to-noise ratio: 120 dB
Frequency response: 10 – 20,000 Hz
Wow and flutter: Below measurable limit

Tuner section
FM
Tuning range:
CDX-GT420U: US model:
87.5 – 107.9 MHz
CDX-GT420U: AEP, UK, Russian model/ GT424U:
87.5 – 108.0 MHz
CDX-GT470U: E, indian model/GT470US:
87.5 – 108.0 MHz (at 50 kHz step)
87.5 – 107.9 MHz (at 200 kHz step)
CDX-GT470U: Saudi Arabian model:
87.5 – 108.0 MHz (at 50 kHz step)
CDX-GT427UE:
FM1/FM2: 87.5 – 108.0 MHz (at 50 kHz step)
FM3: 65 – 74 MHz (at 30 kHz step)
FM tuning interval:
CDX-GT470U: E, indian model/GT470US:
50 kHz/200 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Usable sensitivity: 9 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio:
67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz:
0.5 % (stereo), 0.3 % (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 – 15,000 Hz

AM
CDX-GT420U: US model:
Tuning range: 530 – 1,710 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

MW/LW
CDX-GT420U: AEP, UK, Russian model/ GT424U/GT427UE:
Tuning range:
MW: 531 – 1,602 kHz
LW: 153 – 279 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
10.7 MHz/450 kHz
Sensitivity:
MW: 30 µV, LW: 40 µV

– Continued on next page –

FM/AM COMPACT DISC PLAYER
CDX-GT420U: US model

FM/MW/LW COMPACT DISC PLAYER
CDX-GT420U: AEP, UK, Russian model/GT424U/GT427UE

FM/MW/SW COMPACT DISC PLAYER
CDX-GT470U/GT470US

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2008A04-1
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Sony Corporation
Audio Business Group
Published by Sony Techno Create Corporation

SONY®

MW

CDX-GT470U/GT470US:
Tuning range:
CDX-GT470U: E, indian model/GT470US:
531 – 1,602 kHz (at 9 kHz step)
530 – 1,710 kHz (at 10 kHz step)
CDX-GT470U: Saudi Arabian model:
531 – 1,602 kHz (at 9 kHz step)
MW tuning interval:
CDX-GT470U: E, indian model/GT470US:
9 kHz/10 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

SW

CDX-GT470U/GT470US:
Tuning range:
SW1: 2,940 – 7,735 kHz
SW2: 9,500 – 18,135 kHz
(except for 10,140 – 11,575 kHz)
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

USB Player section

Interface: USB (Full-speed)
Maximum current: 500mA

Power amplifier section

Outputs: Speaker outputs (sure seal connectors)
Speaker impedance: 4 – 8 ohms
Maximum power output: 52 W × 4 (at 4 ohms)

General

Output:
Audio outputs terminal (sub/rear switchable)
Power antenna (aerial) relay control terminal
Power amplifier control terminal
Inputs:
Telephone ATT control terminal
(CDX-GT420U: AEP, UK, Russian model/
GT424U/GT427UE)
Remote controller input terminal
Antenna (aerial) input terminal
AUX input jack (stereo mini jack)
Tone controls:
Low: ±10 dB at 60 Hz (XPLOD)
Mid: ±10 dB at 1 kHz (XPLOD)
High: ±10 dB at 10 kHz (XPLOD)
Power requirements: 12 V DC car battery
(negative ground (earth))
Dimensions: Approx. 178 × 50 × 179 mm
(7 1/8 × 2 × 7 1/8 in.) (w/h/d)
Mounting dimensions: Approx. 182 × 53 × 162 mm
(7 1/4 × 2 1/8 × 6 1/2 in.) (w/h/d)
Mass: Approx. 1.2 kg (2 lb. 11 oz.)
Supplied accessories:
Card remote commander: RM-X151
Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

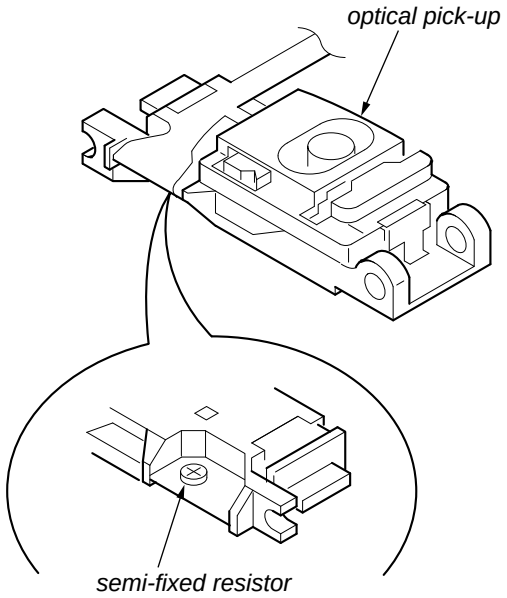
TEST DISCS

Please use the following test discs for the check on the CD section.

YDES-18 (Part No. 3-702-101-01)
PATD-012 (Part No. 4-225-203-01)

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



SAFETY-RELATED COMPONET WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.

Except GT420U: US model

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

- **CD playback**
  You can play CD-DA (also containing CD TEXT), CD-R/CD-RW (MP3/WMA/AAC files).

Type of discs	Label on the disc
CD-DA	COMPACT disc DIGITAL AUDIO Recordable / COMPACT disc DIGITAL AUDIO ReWritable
MP3 WMA AAC	COMPACT disc DIGITAL AUDIO Recordable / COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable / COMPACT disc ReWritable

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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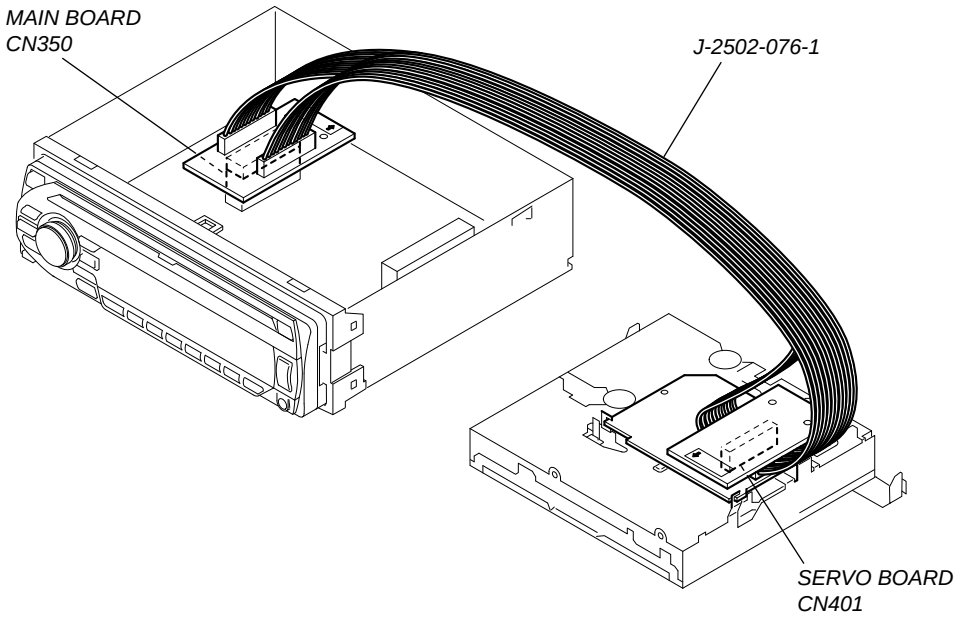
SECTION 1
SERVICE NOTE

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN350) and the SERVO board (CN401) with the extension cable (Part No. J-2502-076-1).



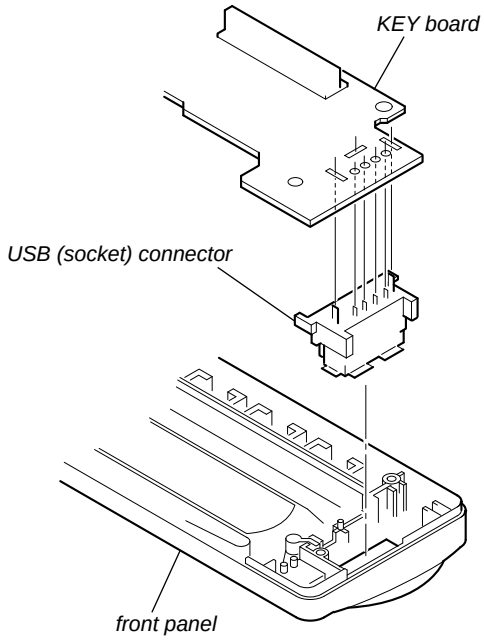
NOTE FOR REPLACEMENT OF THE SERVO BOARD

When repairing, the complete SERVO board (A-1362-921-A) should be replaced since any parts in the SERVO board cannot be repaired.

NOTE FOR REPLACEMENT OF THE USB CONNECTOR (J11)

To replace the USB connector requires alignment.

1. Insert the USB connector into the front panel.
2. Place the KEY board on the front panel and align the terminals of the USB connector with the holes in the KEY board.
3. Solder the four terminals of the connector.



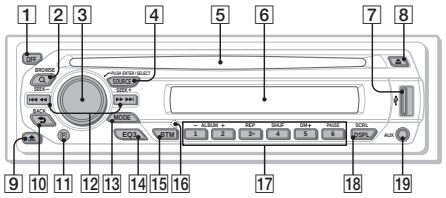
CDX-GT420U/GT424U/GT427UE/GT470U/GT470US
SECTION 2
GENERAL

This section is extracted from instruction manual.

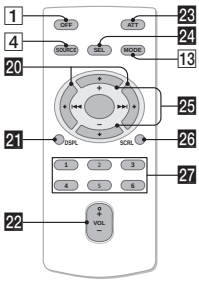
- **LOCATION OF CONTROLS**
- **CDX-GT420U: US model**

Location of controls and basic operations

Main unit



Card remote commander RM-X151



This section contains instructions on the location of controls and basic operations. For details, see the respective pages.
For USB device operation, see “USB devices” on page 10.
The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 **OFF button**
To power off; stop the source.

2 **(BROWSE) button** page 8
To enter the Quick-BrowZer mode.

3 **Control dial/select button** page 8, 11
To adjust volume/select search category (rotate); select setup items (press and rotate).

4 **SOURCE button**
To power on; change the source (Radio/CD/USB/AUX).

5 **Disc slot**
Insert the disc (label side up), playback starts.

6 **Display window**

7 **USB terminal** page 10
To connect to the USB device.

8 **⏏ (eject) button**
To eject the disc.

9 **(front panel release) button** page 5

10 **(BACK) button** page 8
To return to the previous display.

11 **Receptor for the card remote commander**

12 **SEEK –/+ buttons**
CD/USB:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).

13 **MODE button** page 9
To select the radio band (FM/AM); select the play mode of ATRAC Audio Device.

14 **EQ3 (equalizer) button** page 11
To select an equalizer type (XPLOD, VOCAL, EDGE, CRUISE, SPACE, GRAVITY, CUSTOM or OFF).

15 **BTM button** page 9
To start the BTM function (press and hold).

16 **RESET button** (located behind the front panel) page 4

17 **Number buttons**
CD/USB:
①/②: **ALBUM –/+**
To skip albums (press); skip albums continuously (press and hold).
③: **REP** page 9
④: **SHUF** page 9
⑤: **DM+** page 4
To activate the DM+ function, set “DM+-ON.” To cancel, set “DM+-OFF.”
⑥: **PAUSE**
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).

18 **DSPL (display)/SCRL (scroll) button** page 9
To change display items (press); scroll the display item (press and hold).

19 **AUX input jack** page 12
To connect a portable audio device.

The following buttons on the card remote commander have also different buttons/functions from the unit. Remove the insulation film before use (page 4).

20 **⬅ (I◀◀)/➡ (▶▶I) buttons**
To control CD/radio/USB, the same as (SEEK) –/+ on the unit.
Setup, sound setting, etc., can be operated by ⬅ ➡.

21 **DSPL (display) button**
To change display items.

22 **VOL (volume) +/– button**
To adjust volume.

23 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

24 **SEL (select) button**
The same as the select button on the unit. During the Quick-BrowZer mode, (SEL) (select) is inactive.

25 **⬆ (+)/⬇ (–) buttons**
To control CD/USB, the same as ①/② (ALBUM –/+) on the unit.
Setup, sound setting, etc., can be operated by ⬆ ⬇.

26 **SCRL (scroll) button**
To scroll the display item.

27 **Number buttons**
To receive stored stations (press); store stations (press and hold).

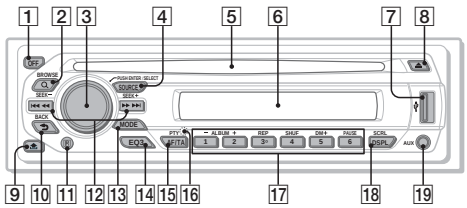
Notes
- *When ejecting/inserting a disc, keep any USB devices disconnected to avoid damage to the disc.*
- *If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.*

About USB cap
When not using the USB terminal (7), use the supplied USB cap to prevent dust or dirt entering. Keep the USB cap out of the reach of children to prevent accidental swallowing.

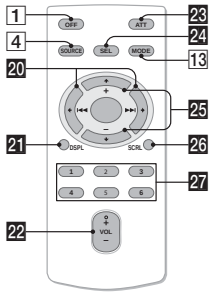
- **CDX-GT420U: AEP, UK, Russian model/GT424U/GT427UE**

Location of controls and basic operations

Main unit



Card remote commander RM-X151



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For USB device operation, see “USB devices” on page 11.
The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 **OFF button**
To power off; stop the source.

2 **(BROWSE) button** page 8
To enter the Quick-BrowZer mode.

3 **Control dial/select button** page 8, 12
To adjust volume/select search category (rotate); select setup items (press and rotate).

4 **SOURCE button**
To power on; change the source (Radio/CD/USB/AUX).

5 **Disc slot**
Insert the disc (label side up), playback starts.

6 **Display window**

7 **USB terminal** page 11
To connect to the USB device.

8 **⏏ (eject) button**
To eject the disc.

9 **(front panel release) button** page 5

10 **(BACK) button** page 8
To return to the previous display.

11 **Receptor for the card remote commander**

12 **SEEK –/+ buttons**
CD/USB:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).

13 **MODE button** page 9
To select the radio band (FM/MW/LW); select the play mode of ATRAC Audio Device.

14 **EQ3 (equalizer) button** page 12
To select an equalizer type (XPLOD, VOCAL, EDGE, CRUISE, SPACE, GRAVITY, CUSTOM or OFF).

15 **AF (Alternative Frequencies)/ TA (Traffic Announcement)/ PTY (Program Type) button** page 10, 11
To set AF and TA (press); select PTY (press and hold) in RDS.

16 **RESET button** (located behind the front panel) page 4

17 **Number buttons**
CD/USB:
①/②: **ALBUM –/+**
To skip albums (press); skip albums continuously (press and hold).
③: **REP** page 9
④: **SHUF** page 9
⑤: **DM+** page 4
To activate the DM+ function, set “DM+-ON.” To cancel, set “DM+-OFF.”
⑥: **PAUSE**
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).

18 **DSPL (display)/SCRL (scroll) button** page 9
To change display items (press); scroll the display item (press and hold).

19 **AUX input jack** page 13
To connect a portable audio device.

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20 **⬅ (I◀◀)/➡ (▶▶I) buttons**
To control CD/radio/USB, the same as (SEEK) –/+ on the unit.
Setup, sound setting, etc., can be operated by ⬅ ➡.

21 **DSPL (display) button**
To change display items.

22 **VOL (volume) +/– button**
To adjust volume.

23 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

24 **SEL (select) button**
The same as the select button on the unit. During the Quick-BrowZer mode, (SEL) (select) is inactive.

25 **⬆ (+)/⬇ (–) buttons**
To control CD/USB, the same as ①/② (ALBUM –/+) on the unit.
Setup, sound setting, etc., can be operated by ⬆ ⬇.

26 **SCRL (scroll) button**
To scroll the display item.

27 **Number buttons**
To receive stored stations (press); store stations (press and hold).

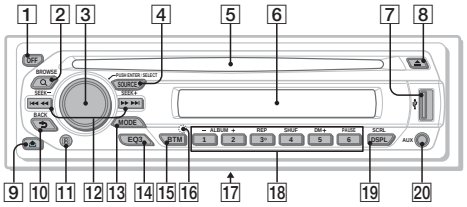
Notes
- *When ejecting/inserting a disc, keep any USB devices disconnected to avoid damage to the disc.*
- *If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.*

About USB cap
When not using the USB terminal (7), use the supplied USB cap to prevent dust or dirt entering. Keep the USB cap out of the reach of children to prevent accidental swallowing.

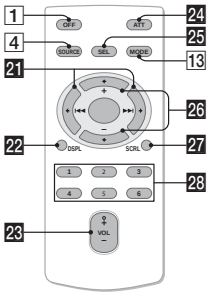
• **CDX-GT470U/GT470US**

Location of controls and basic operations

Main unit



Card remote commander RM-X151



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4 **SOURCE button**
To power on; change the source (Radio/CD/USB/AUX).

5 **Disc slot**
Insert the disc (label side up), playback starts.

6 **Display window**

7 USB terminal page 10
To connect to the USB device.

8 **⏏ (eject) button**
To eject the disc.

9 **(front panel release) button** page 5

10 **(BACK) button** page 8
To return to the previous display.

11 **Receptor for the card remote commander**

12 **SEEK –/+ buttons**
CD/USB:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
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13 **MODE button** page 9
To select the radio band (FM/MW/SW); select the play mode of ATRAC Audio Device.

14 **EQ3 (equalizer) button** page 11
To select an equalizer type (XPLOD, VOCAL, EDGE, CRUISE, SPACE, GRAVITY, CUSTOM or OFF).

15 **BTM button** page 9
To start the BTM function (press and hold).

16 **RESET button** (located behind the front panel) page 4

17 **Frequency select switch** (located on the bottom of the unit)
See "Frequency select switch" in the supplied installation/connections manual.

18 **Number buttons**
CD/USB:
①/②: **ALBUM –/+**
To skip albums (press); skip albums continuously (press and hold).
③: **REP** page 9
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⑤: **DM+** page 4
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20 **AUX input jack** page 12
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21 **⬅ (|◀◀)/➡ (▶▶|) buttons**
To control CD/radio/USB, the same as SEEK –/+ on the unit.
Setup, sound setting, etc., can be operated by ⬅ ➡.

22 **DSPL (display) button**
To change display items.

23 **VOL (volume) +/– button**
To adjust volume.

24 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

25 **SEL (select) button**
The same as the select button on the unit.
During the Quick-BrowZer mode, SEL (select) is inactive.

26 **⬆ (+)/⬇ (–) buttons**
To control CD/USB, the same as ①/② (ALBUM –/+) on the unit.
Setup, sound setting, etc., can be operated by ⬆⬇.

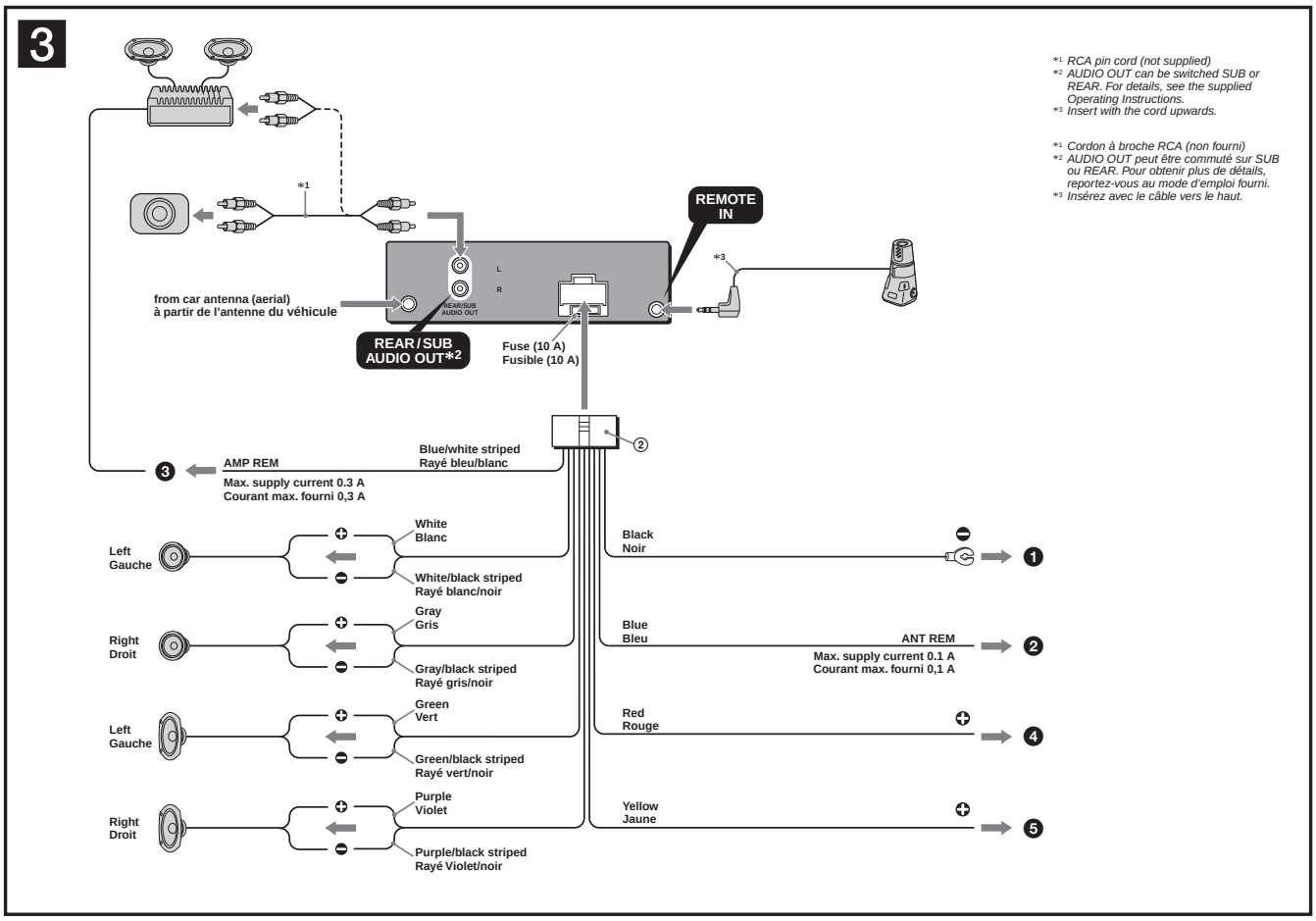
27 **SCRL (scroll) button**
To scroll the display item.

28 **Number buttons**
To receive stored stations (press); store stations (press and hold).

Notes
- *When ejecting/inserting a disc, keep any USB devices disconnected to avoid damage to the disc.*
- *If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless SOURCE on the unit is pressed, or a disc is inserted to activate the unit first.*

About USB cap
When not using the USB terminal (7), use the supplied USB cap to prevent dust or dirt entering. Keep the USB cap out of the reach of children to prevent accidental swallowing.

- **CONNECTIONS**
- **CDX-GT420U: US model**



*1 RCA pin cord (not supplied)
*2 AUDIO OUT can be switched SUB or REAR. For details, see the supplied Operating Instructions.
*3 Insert with the cord upwards.

*1 Cordon à broche RCA (non fourni)
*2 AUDIO OUT peut être commuté sur SUB ou REAR. Pour obtenir plus de détails, reportez-vous au mode d'emploi fourni.
*3 Insérez avec le câble vers le haut.

Connection diagram 3

❶ To a metal surface of the car
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster
Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ To the +12 V power terminal which is energized in the accessory position of the ignition switch
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times. Be sure to connect the black ground (earth) lead to a metal surface of the car first.*
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❺ To the +12 V power terminal which is energized at all times
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schéma de raccordement 3

❶ À un point métallique de la voiture
Branchez d'abord le câble de mise à la masse noir et, ensuite, les câbles d'alimentation jaune et rouge.

❷ Au câble de commande d'antenne électrique ou au câble d'alimentation de l'amplificateur d'antenne
Remarques
- *Il n'est pas nécessaire de raccorder ce câble s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les câbles de commande et d'alimentation ».*

❸ Au niveau de AMP REMOTE IN de l'amplificateur de puissance en option
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires
Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le câble de mise à la masse noir à un point métallique du véhicule.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les câbles de commande et d'alimentation ».*

❺ À la borne +12 V qui est alimentée en permanence
Raccordez d'abord le câble de mise à la masse noir à un point métallique du véhicule.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande d'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne (bleu) ou le câble d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout problème de fonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs sont bien raccordés.

- **CDX-GT420U: AEP, UK, Russian model/GT424U/GT427UE**

3

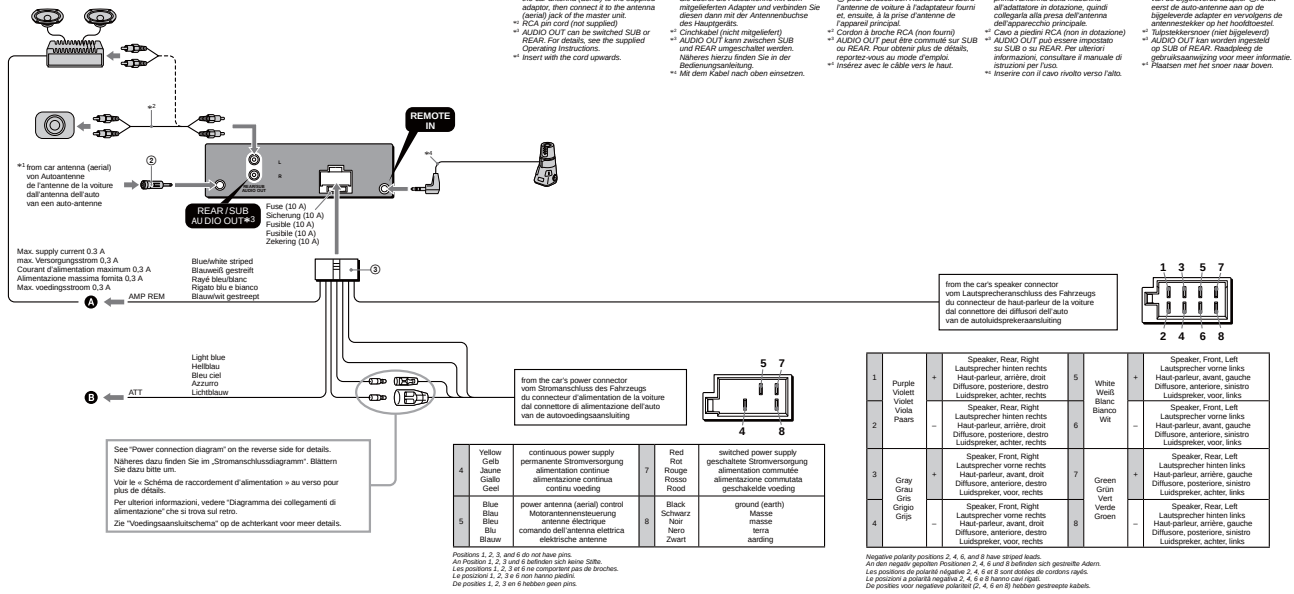
**1 Note for the antenna (aerial) connecting*
If your car antenna (aerial) is an ISO (International Organization for Standardization) type, use the supplied adaptor Ⓕ to connect it. First connect the car antenna (aerial) to the supplied adaptor, then connect it to the antenna (aerial) jack of the master unit.
**2 RCA pin cord (not supplied)*
**3 AUDIO OUT can be switched SUB or REAR. For details, see the supplied Operating Instructions.*
**4 Insert with the cord upwards.*

**1 Hinweis zum Anschließen der Antenne*
Wenn Ihre Autoantenne der ISO-Norm (Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters Ⓕ an. Verbinden Sie zuerst die Autoantenne mit dem mitgelieferten Adapter und verbinden Sie dieses dann mit der Antennenbuchse des Hauptgeräts.
**2 Cinchkabel (nicht mitgeliefert)*
**3 AUDIO OUT kann zwischen SUB und REAR umgeschaltet werden. Näheres hierzu finden Sie in der Bedienungsanleitung.*
**4 Mit dem Kabel nach oben einsetzen.*

**1 Remarque sur le raccordement de l'antenne*
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓕ pour la raccorder. Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
**2 Cordon à broche RCA (non fourni)*
**3 AUDIO OUT peut être commuté sur SUB ou REAR. Pour obtenir plus de détails, reportez-vous au mode d'emploi.*
**4 Insérez avec le câble vers le haut.*

**1 Nota per il collegamento dell'antenna*
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore Ⓕ in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
**2 Cavo a piedini RCA (non in dotazione)*
**3 AUDIO OUT può essere impostato su SUB o su REAR. Per ulteriori informazioni, consultare il manuale di istruzioni per l'uso.*
**4 Inserire con il cavo rivolto verso l'alto.*

**1 Opmerking bij de antenne-aansluiting*
Indien uw auto is uitgerust met een antenne van het type ISO (International Organization for Standardization), moet u die aansluiten met behulp van de bijgeleverde adapter Ⓕ. Sluit eerst de auto-antenne aan op de bijgeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.
**2 Tulpstekkersnoer (niet bijgeleverd)*
**3 AUDIO OUT kan worden ingesteld op SUB of REAR. Raadpleeg de gebruiksaanwijzing voor meer informatie.*
**4 Plaatsen met het snoer naar boven.*


REMOTE IN
*1 from car antenna (aerial)
von Autoantenne
de l'antenne de la voiture
dall'antenna dell'auto
van een auto-antenne
REAR / SUB AU DIO OUT *3
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
Max. supply current 0.3 A
max. Versorgungsstrom 0,3 A
Courant d'alimentation maximum 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
Blue/white striped
Blauweiß gestreift
Rayé bleu/blanc
Rigato blu e bianco
Blauw/wit gestreept
AMP REM
Light blue
Hellblau
Bleu ciel
Azzurro
Lichtblauw
ATT
from the car's power connector
vom Stromanschluss des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsaansluiting
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore dei diffusori dell'auto
van de autoluidsprekeraansluiting
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le « Schéma de raccordement d'alimentation » au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.

4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5	Blue Blau Bleu Blu Blauw	power antenna (aerial) control Motorantennensteuerung antenne électrique comando dell'antenna elettrica elektrische antenne	8	Black Schwarz Noir Nero Zwart	ground (earth) Masse masse terra aarding

Positions 1, 2, 3, and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

1	Purple Violett Violet Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Gray Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped leads.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

Connection diagram 3

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.
Ⓑ **To the interface cable of a car telephone**

Warning

If you have a power antenna (aerial) without a relay box, connecting this unit with the supplied power connecting lead ③ may damage the antenna (aerial).

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Anschlussdiagramm 3

Ⓐ **An AMP REMOTE IN des gesondert erhältlichen Endverstärkers**
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.
Ⓑ **An Schnittstellenkabel eines Autotelefons**

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ③ die Antenne beschädigt werden.

Hinweise zu den Steuer- und Stromversorgungsleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert +12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzen) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/ Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn die Lautsprecher nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass die Lautsprecher richtig angeschlossen sind.

Schémas de raccordement 3

Ⓐ **Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif**
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.
Ⓑ **Vers le cordon de liaison d'un téléphone de voiture**

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ③ risque d'endommager l'antenne.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (fréquence alternative) ou TA (messages de radioguidage).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW (GO)/LW (PO) intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne (bleu) ou le câble d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne tentez pas de raccorder les haut-parleurs en parallèle.*
- *Connectez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec des amplificateurs intégrés) aux bornes des haut-parleurs pourrait endommager l'appareil.*
- *Pour éviter tout problème de fonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si le haut-parleur et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que le haut-parleur et l'amplificateur sont raccordés correctement.

Schema di collegamento 3

Ⓐ **A AMP REMOTE IN di un amplificatore di potenza opzionale**
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.
Ⓑ **Al cavo di interfaccia di un telefono per auto**

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ③, si potrebbe danneggiare l'antenna elettrica se questa non dispone di scatola a relè.

Note sui cavi di controllo e di alimentazione
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione ausiliaria al terminale di alimentazione dell'amplificatore di potenza dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venire danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sui collegamenti
Se il diffusore non è collegato correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che il diffusore sia collegato correttamente.

Aansluitschema 3

Ⓐ **Naar AMP REMOTE IN van een optionele versterker**
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het apparaat worden beschadigd.
Ⓑ **Naar het interface-snoer van een autotelefoon**

Waarschuwing

Indien u een elektrische antenne hebt zonder relaiskast, kan het aansluiten van dit apparaat met de bijgeleverde voedingskabel ③ de antenne beschadigen.

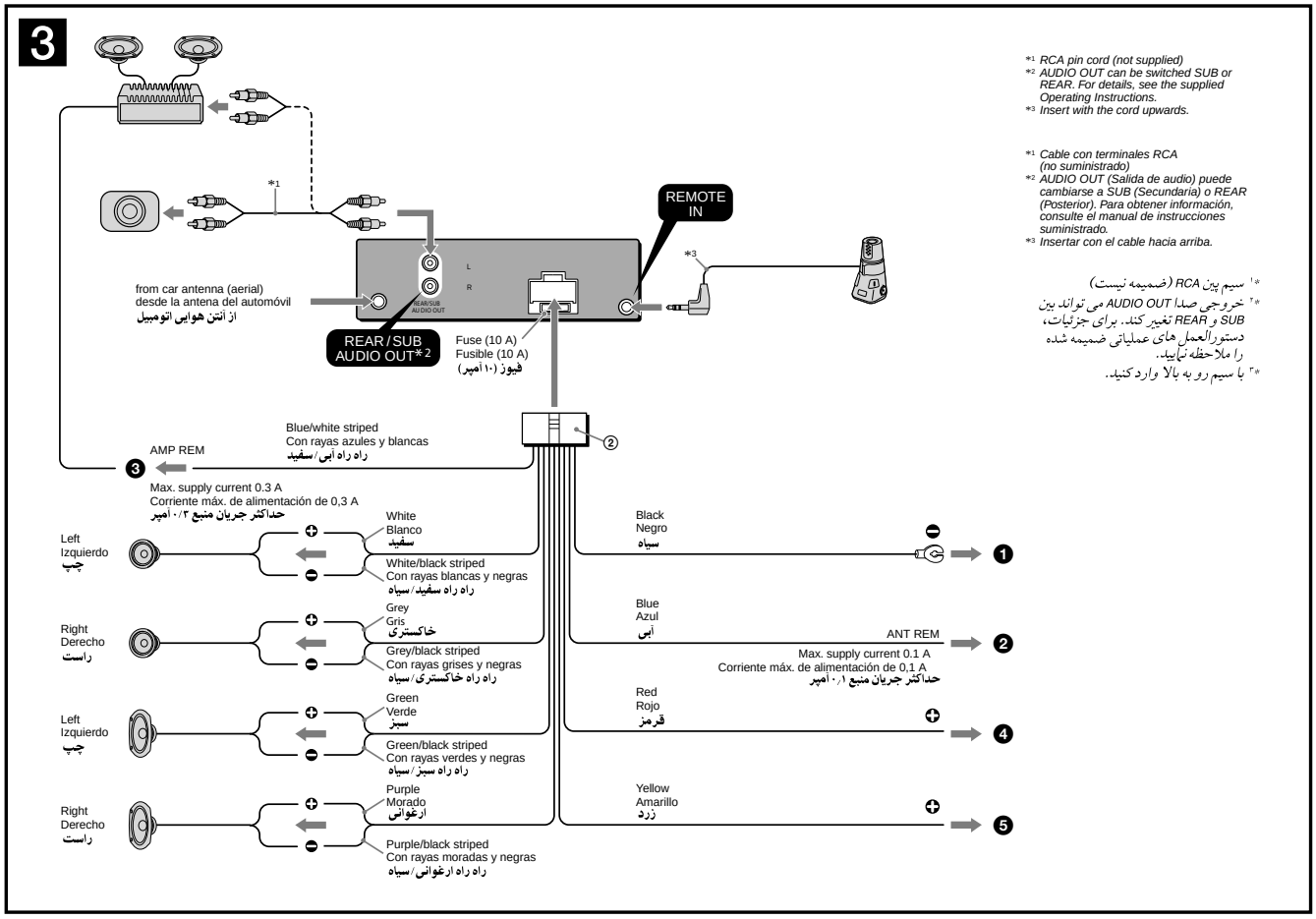
Opmerkingen over de bedienings- en voedingskabels
- *De bedieningskabel van de elektrische antenne (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF (alternatieve frequenties) of TA (verkeersinformatie) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/zijruit, moet u de bedieningskabel van de elektrische antenne (blauw) of de voedingskabel van de accessoires (rood) aansluiten op de voedingsingang van de bestaande antennenversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een elektrische antenne zonder relaiskast te gebruiken.*

Instandhouden van het geheugen
Zolang de gele voedingskabel is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer de contactschakelaar van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als u dit niet doet, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aardingskabel van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter- en linkerluidspreker niet op elkaar aan.*
- *Verbind de aarddraad van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidsprekeraansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) kabel is voor de rechter- en linkerluidsprekers.*
- *Verbind de luidsprekerkabels niet met elkaar.*

Opmerking over aansluiten
Als de luidspreker en versterker niet goed zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker en versterker correct zijn aangesloten.

- **CDX-GT470U/GT470US**



*1 RCA pin cord (not supplied)
*2 AUDIO OUT can be switched SUB or REAR. For details, see the supplied Operating Instructions.
*3 Insert with the cord upwards.

*1 Cable con terminales RCA (no suministrado)
*2 AUDIO OUT (Salida de audio) puede cambiarse a SUB (Secundaria) o REAR (Posterior). Para obtener información, consulte el manual de instrucciones suministrado.
*3 Insertar con el cable hacia arriba.

*1 سیم پین RCA (ضمیمه نیست)
*2 خروجی صدا AUDIO OUT می تواند بین SUB و REAR تغییر کند. برای جزئیات، دستورالعمل های عملیاتی ضمیمه شده را ملاحظه نمایید.
*3 با سیم رو به بالا وارد کنید.

Connection diagram 3

❶ To a metal surface of the car
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster
Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your car has a built-in FM/MW/SW antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ To the +12 V power terminal which is energized in the accessory position of the ignition switch
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times. Be sure to connect the black ground (earth) lead to a metal surface of the car first.*
- *When your car has a built-in FM/MW/SW antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❺ To the +12 V power terminal which is energized at all times
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/MW/SW antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Diagrama de conexión 3

❶ A una superficie metálica del automóvil
Conecte primero el cable de conexión a masa negro, y después los cables amarillo y rojo de fuente de alimentación.

❷ Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de señal de la antena
Notas
- *Si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/MW/SW en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ A AMP REMOTE IN de un amplificador de potencia opcional
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de encendido
Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/MW/SW en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❺ Al terminal de alimentación de +12 V que recibe energía sin interrupción
Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.

Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/MW/SW incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o el cable de fuente de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallas de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si la unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz no está conectado correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión del altavoz.

نمودار اتصال 3

❶ به یک سطح فلزی اتومبیل
ابتدا سیم سیاه زمین را وصل کنید، سپس سیم های ورودی زرد و قرمز را وصل کنید.

❷ به سیم کنترل آنتن هوایی برقی یا سیم منبع برق تقویت کننده هوایی
نکات
- *در صورتی که آنتن هوایی برقی یا تقویت کننده هوایی وجود ندارد، یا با یک آنتن هوایی تلسکوپی دستی وصل کردن این سیم ضروری نیست.*
- *هنگامی که اتومبیل شما دارای یک آنتن هوایی FM/MW/SW در شیشه عقبی/ کناری می باشد، " نکات در مورد سیم های کنترل و منبع برق" را ملاحظه نمایید.*

❸ به AMP REMOTE IN یک تقویت کننده نیرو اختیاری
این اتصال تنها برای تقویت کننده ها است. وصل کردن هر سیستم دیگری ممکن است دستگاه را خراب کند.

❹ به ترمینال برق ۱۲+ ولت که در موقعیت جانبی کلید احتراق نیرو می گیرد
نکات
- *اگر هیچ موقعیت جانبی وجود ندارد، به ترمینال برق (باطری) ۱۲+ ولت که همواره نیرو می گیرد وصل کنید. اطمینان حاصل کنید که ابتدا سیم سیاه زمین را به سطح فلزی اتومبیل وصل کنید.*
- *هنگامی که اتومبیل شما دارای یک آنتن هوایی FM/MW/SW در شیشه عقبی/ کناری می باشد، " نکات در مورد سیم های کنترل و منبع برق" را ملاحظه نمایید.*

❺ به ترمینال برق ۱۲+ ولت که همواره نیرو می گیرد
اطمینان حاصل کنید که ابتدا سیم سیاه زمین را به سطح فلزی اتومبیل وصل کنید.

نکات در مورد سیم های کنترل و منبع برق
- *هنگامی که شما موج یاب را روشن می کنید سیم کنترل آنتن هوایی برقی (آبی) برق مستقیم ۱۲+ ولت را تامین می کند.*
- *هنگامی که اتومبیل شما دارای یک آنتن هوایی FM/MW/SW در شیشه عقبی/ کناری می باشد، سیم کنترل آنتن هوایی برقی (آبی) یا سیم منبع برق جانبی (قرمز) را به ترمینال برق تقویت کننده آنتن هوایی موجود وصل کنید. برای جزئیات، با فروشنده خود مشورت نمایید.*
- *یک آنتن هوایی بدون یک ایستگاه تقویت نمی تواند با این دستگاه مورد استفاده قرار گیرد.*

اتصال حفظ حافظه
هنگامی که سیم منبع برق زرد وصل می شود، برق همیشه به مدار حافظه حتی هنگامی که سوئیچ احتراق خاموش است تامین خواهد شد.

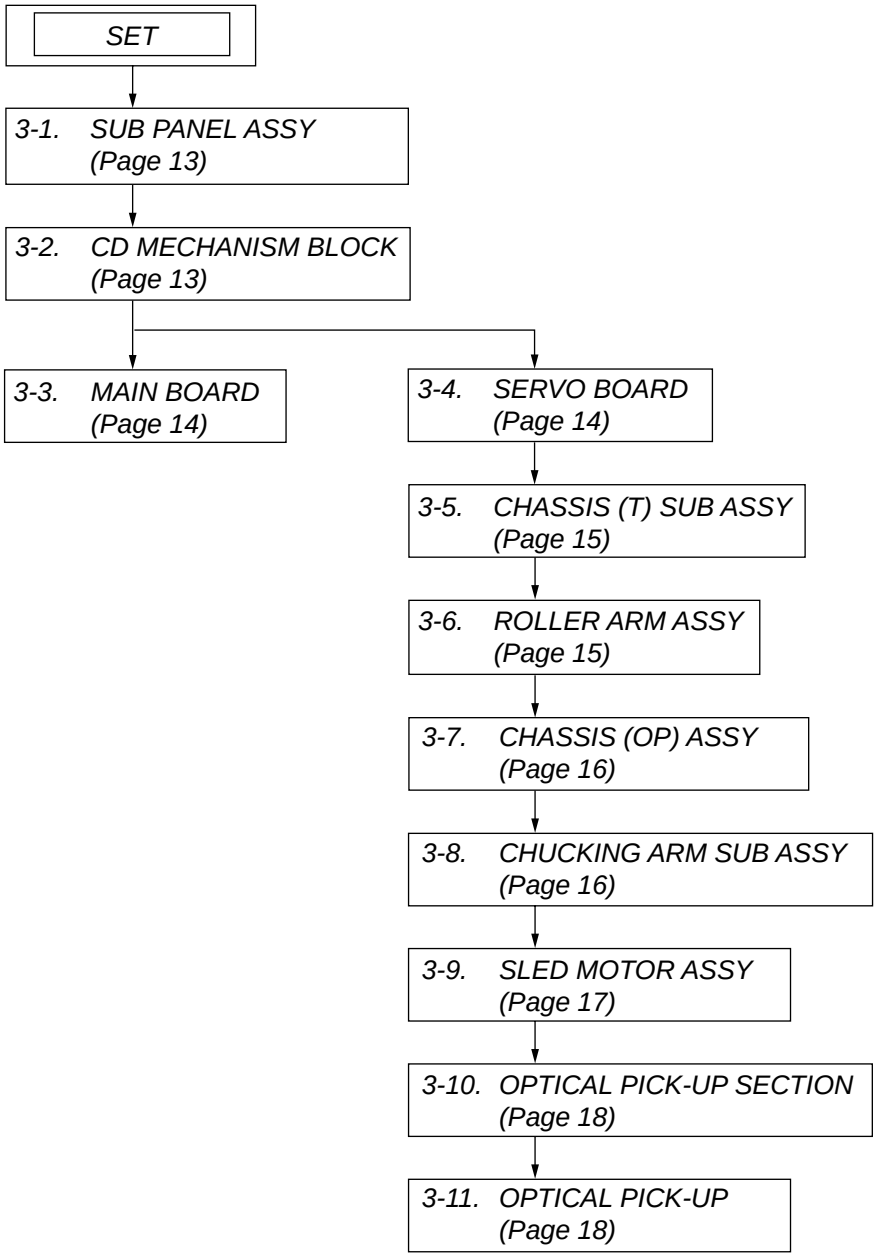
نکات در مورد اتصال بلندگو
- *پیش از وصل کردن بلندگوها، دستگاه را خاموش کنید.*
- *از بلندگوها با امپدانس ۴ تا ۸ اهم، و با ظرفیت بالای برق استفاده کنید تا از صدمه به آن جلوگیری کنید.*
- *ترمینال های بلندگو را به شاسی اتومبیل وصل نکنید، یا ترمینال های بلندگوهای راست را به ترمینال های بلندگوهای چپ وصل نکنید.*
- *سیم زمین این دستگاه را به ترمینال منفی (–) بلندگو وصل نکنید.*
- *سعی نکنید بلندگوها را بطور موازی وصل کنید.*
- *تنها بلندگوهای غیر فعال را وصل کنید. وصل کردن بلندگوهای فعال (با تقویت کننده های داخلی) به ترمینال های بلندگو ممکن است به دستگاه صدمه وارد کند.*
- *برای اجتناب از یک سوء عملکرد، از سیم های بلندگوی داخلی نصب شده در اتومبیل خود در صورتی که دستگاه دارای یک سیم منفی (–) مشترک برای بلندگوهای راست و چپ می باشد استفاده نکنید.*
- *سیم های بلندگوی دستگاه را به یکدیگر وصل نکنید.*

نکته در مورد اتصال
اگر بلندگو و تقویت کننده بطور صحیح وصل نشده باشد، "FAILURE" در صفحه نمایش ظاهر می شود. در چنین حالتی، اطمینان حاصل کنید که بلندگو و تقویت کننده بطور صحیح نصب شده است.

MEMO

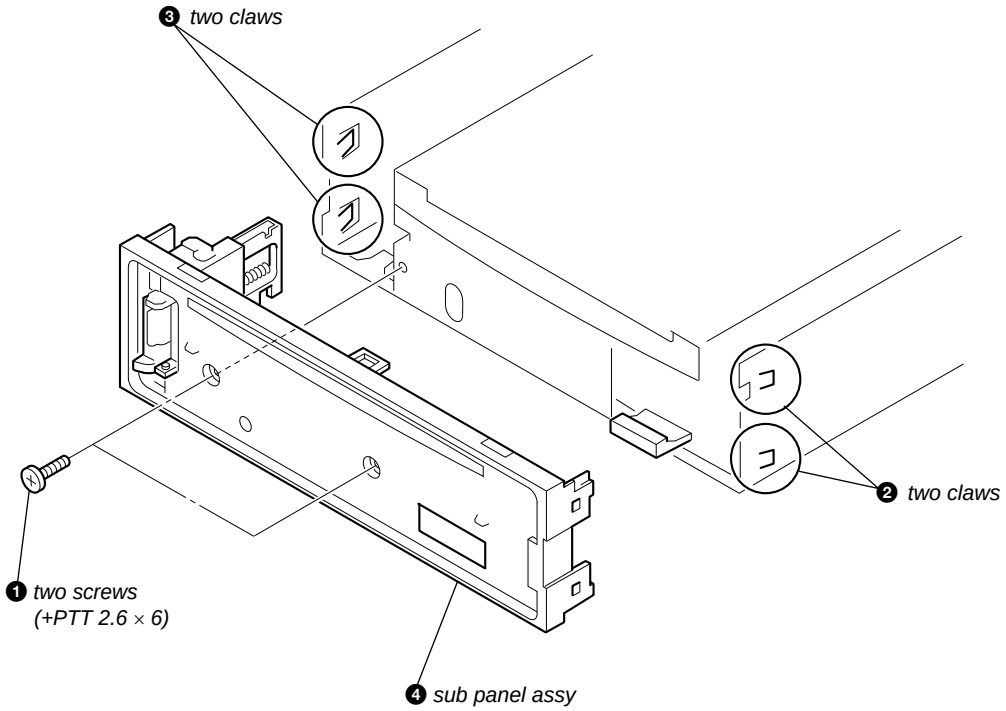
SECTION 3
DISASSEMBLY

- This set can be disassembled in the order shown below.

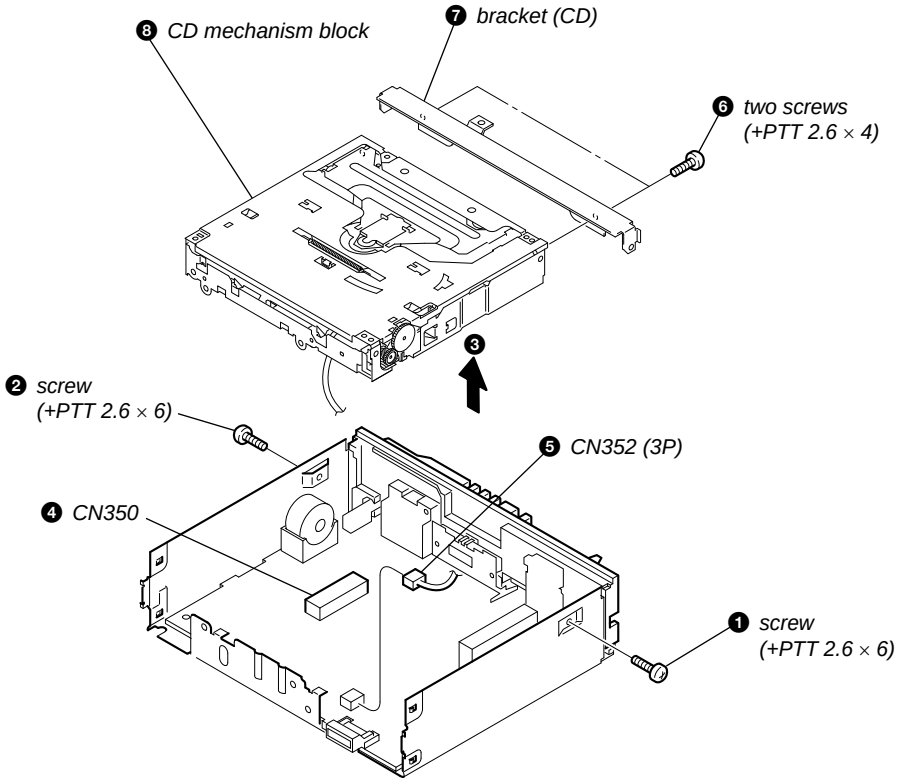

SET
3-1. SUB PANEL ASSY (Page 13)
3-2. CD MECHANISM BLOCK (Page 13)
3-3. MAIN BOARD (Page 14)
3-4. SERVO BOARD (Page 14)
3-5. CHASSIS (T) SUB ASSY (Page 15)
3-6. ROLLER ARM ASSY (Page 15)
3-7. CHASSIS (OP) ASSY (Page 16)
3-8. CHUCKING ARM SUB ASSY (Page 16)
3-9. SLED MOTOR ASSY (Page 17)
3-10. OPTICAL PICK-UP SECTION (Page 18)
3-11. OPTICAL PICK-UP (Page 18)

Note: Follow the disassembly procedure in the numerical order shown below.

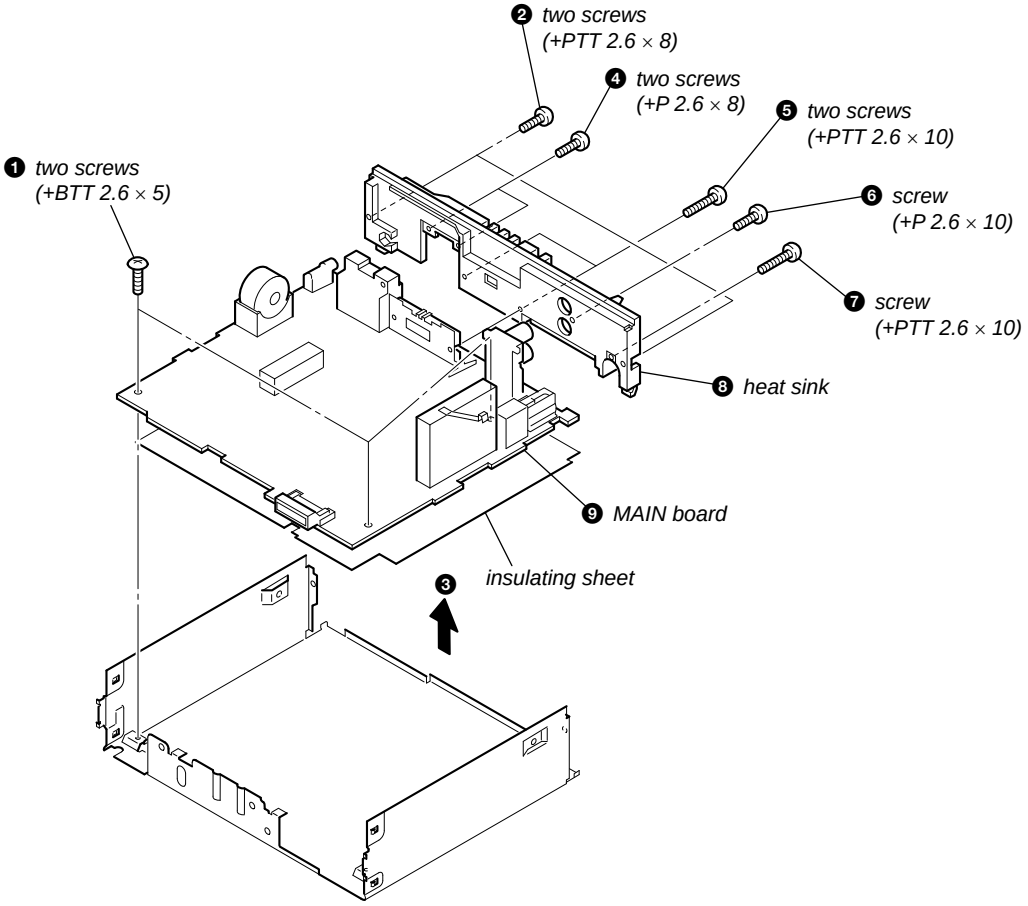
3-1. SUB PANEL ASSY



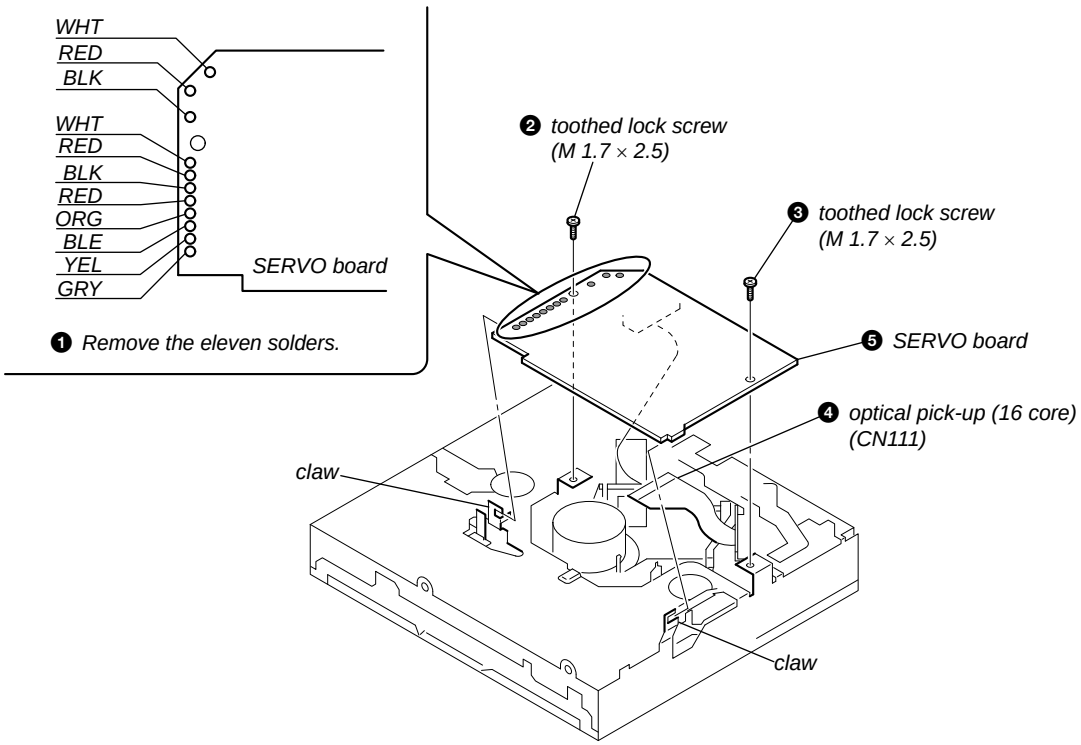
3-2. CD MECHANISM BLOCK



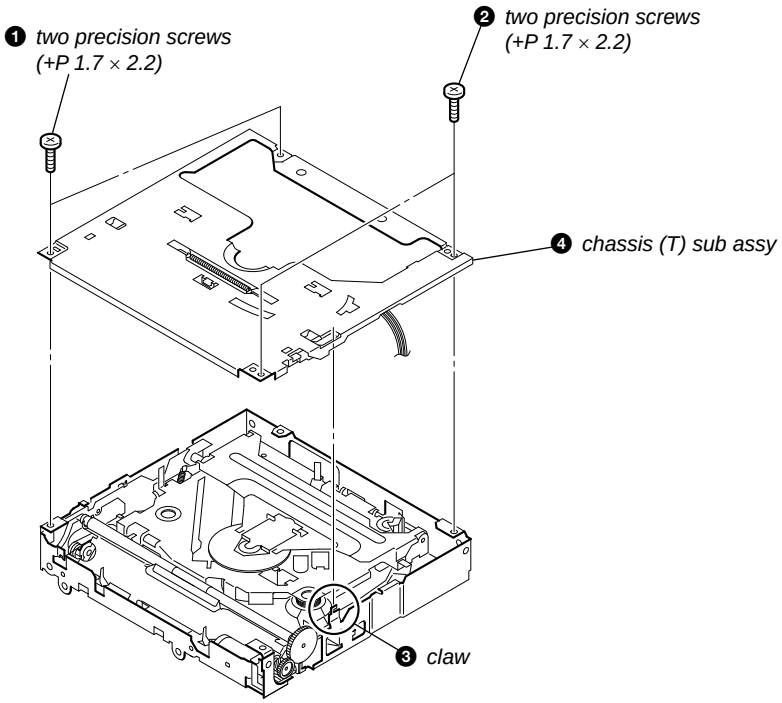
3-3. MAIN BOARD



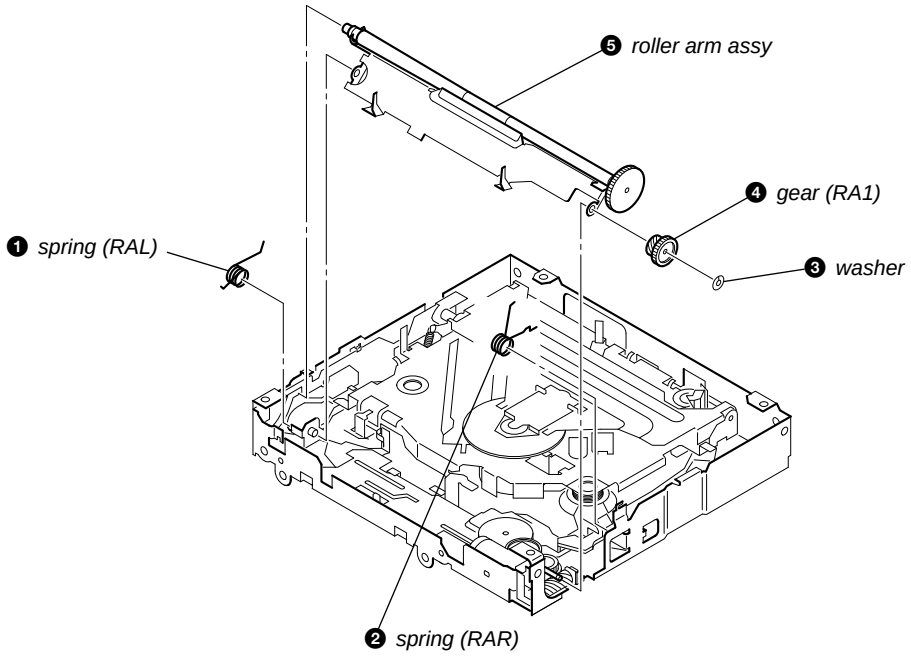
3-4. SERVO BOARD



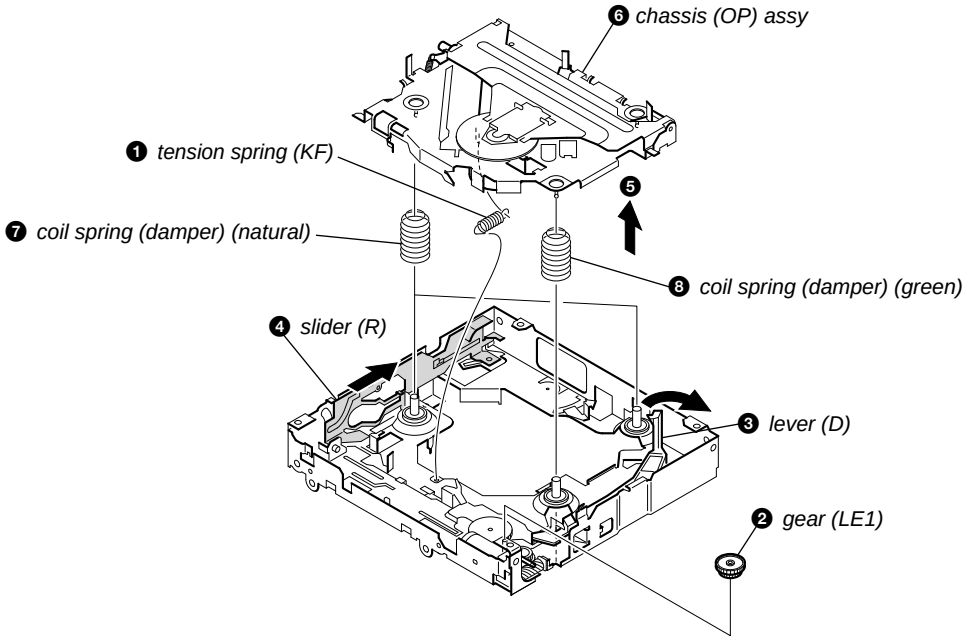
3-5. CHASSIS (T) SUB ASSY



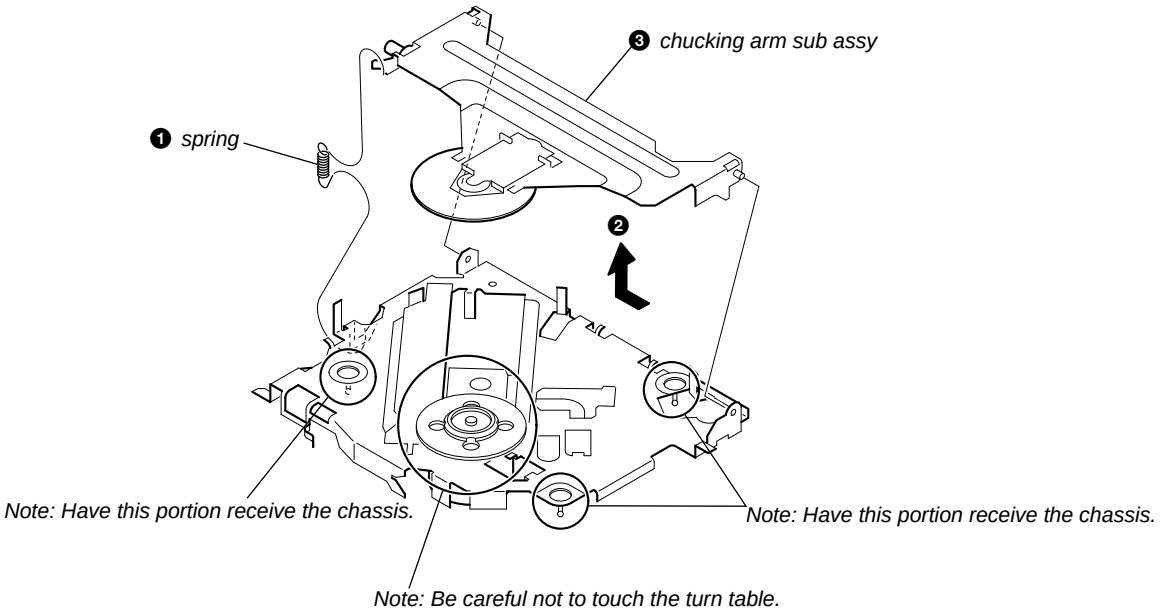
3-6. ROLLER ARM ASSY



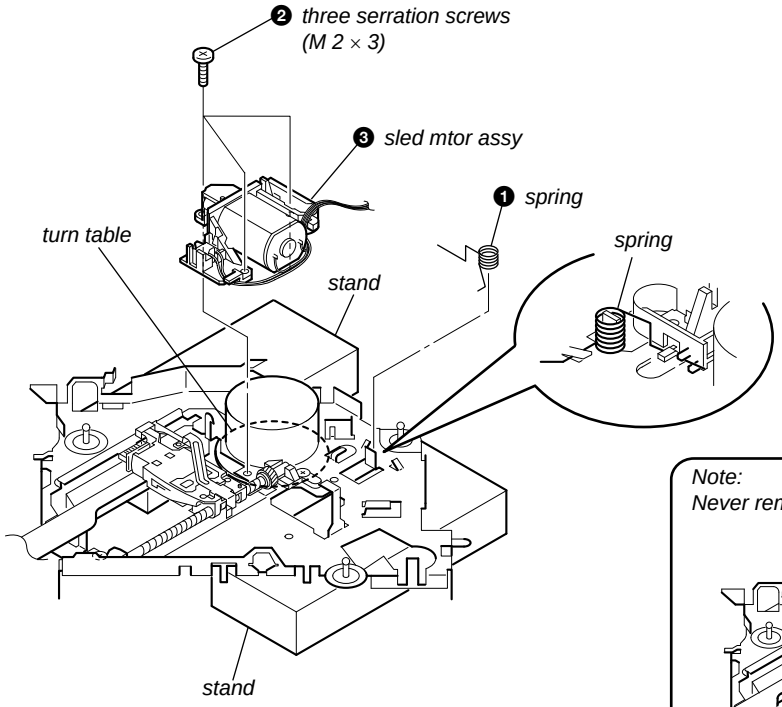
3-7. CHASSIS (OP) ASSY



3-8. CHUCKING ARM SUB ASSY

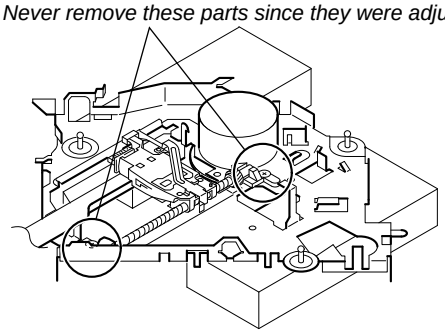

❸ chucking arm sub assy
❶ spring
❷
Note: Have this portion receive the chassis.
Note: Have this portion receive the chassis.
Note: Be careful not to touch the turn table.

3-9. SLED MOTOR ASSY

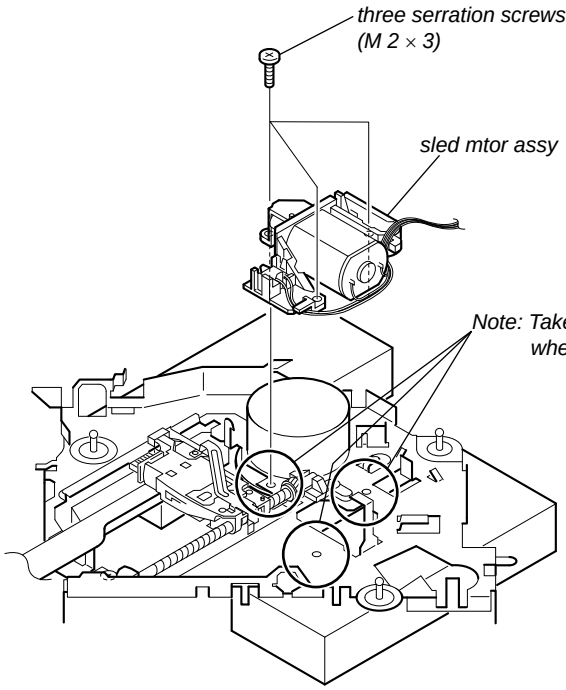


Note: Place the stand with care not to touch the turn table.

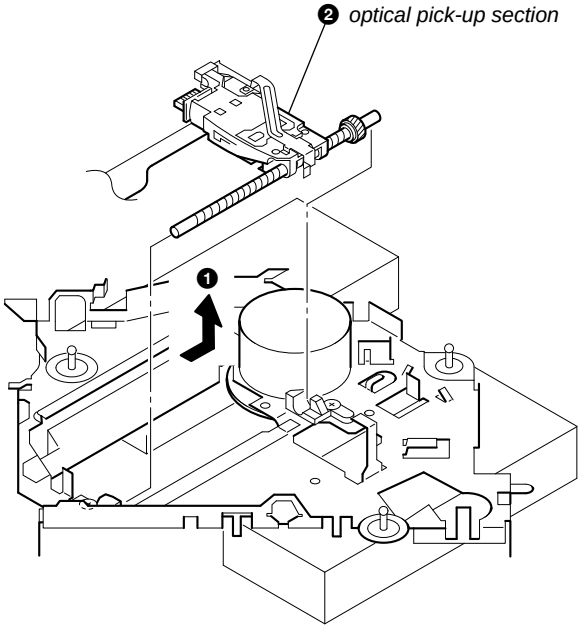
Note:
Never remove these parts since they were adjusted.

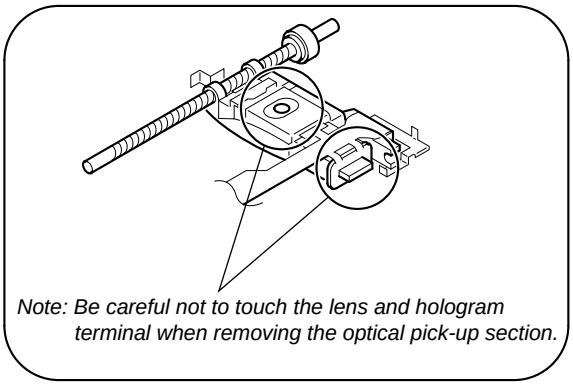


Note for Assembly


three serration screws
(M 2 × 3)
sled mtor assy
Note: Take care to prevent the chassis from being bent
when tightening the three machine screws.

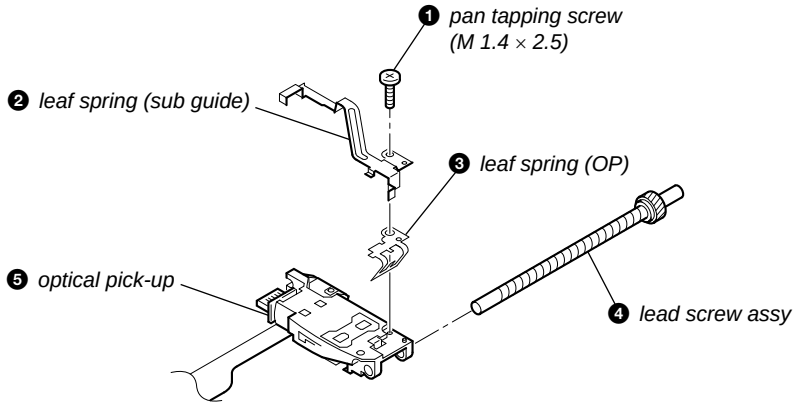
3-10. OPTICAL PICK-UP SECTION



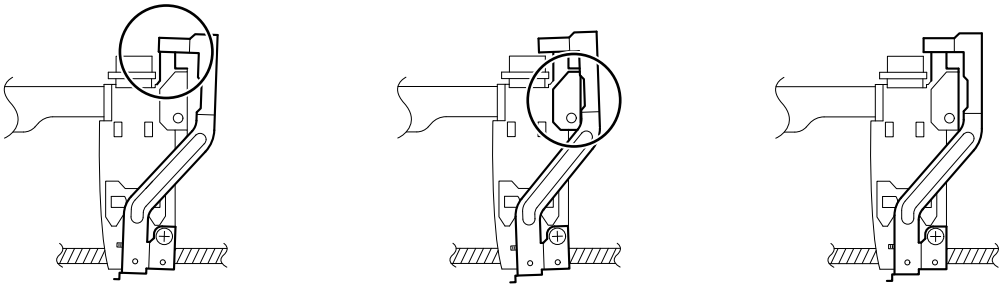


Note: Be careful not to touch the lens and hologram terminal when removing the optical pick-up section.

3-11. OPTICAL PICK-UP



Notes for Assembly



Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.

Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.

There is space at the end of the leaf spring (sub guide) to avoid contact with the slide.

SECTION 4
DIAGNOSIS FUNCTION

Description of the Diagnostics function:

1. Setting the Diag display mode

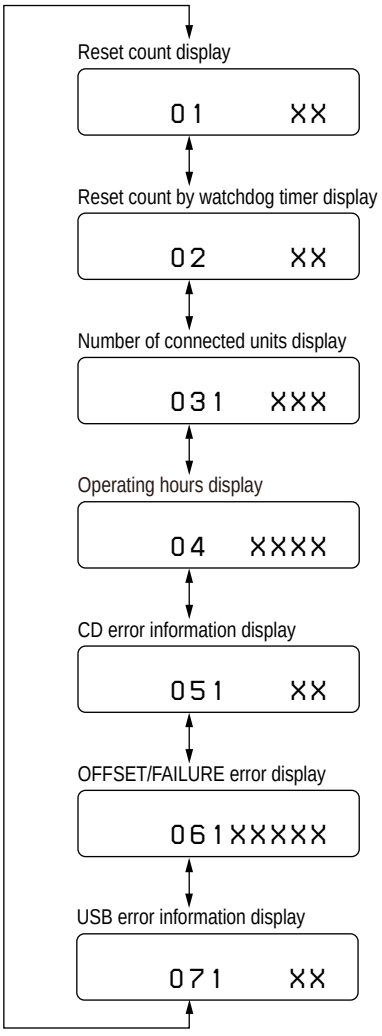
With the power off, press the [4] button, [5] button, and [4] button on the set body or the remote control (for more than 2 seconds) in turn.

2. Canceling the Diag display mode

During the Diag function mode, press the [OFF] button.

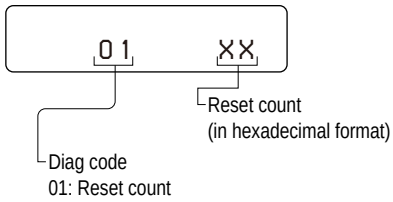
3. Initial display in the Diag display mode.

Just when the Diag mode is entered, “reset count” is displayed. The display mode is switched by each rotation of [►► ►►I/ SEEK +] or [I◄◄ ◄◄/SEEK –] keys.

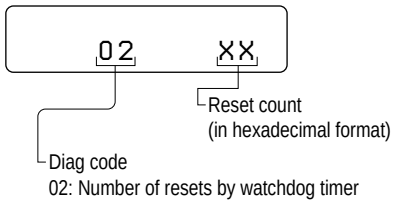


4. Contents of each display mode

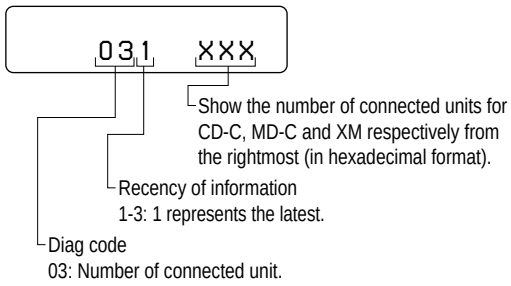
4-1. Reset count display mode



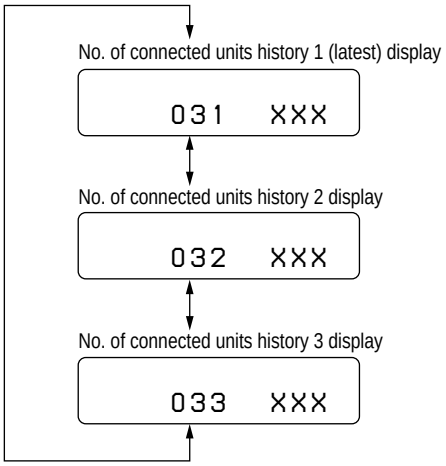
4-2. Reset count by watchdog timer display mode



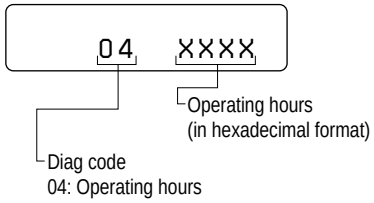
4-3. Number of connected units display mode


031 XXX
Show the number of connected units for CD-C, MD-C and XM respectively from the rightmost (in hexadecimal format).
Recency of information
1-3: 1 represents the latest.
Diag code
03: Number of connected unit.

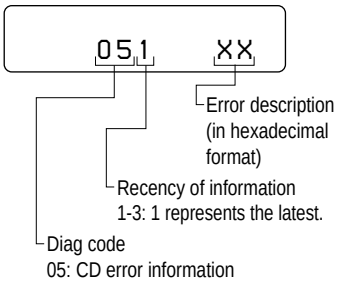
The display mode is switched by each rotation of [2/ALBM+] or [1/ALBM–] keys during the number of connected units display mode.


No. of connected units history 1 (latest) display
031 XXX
No. of connected units history 2 display
032 XXX
No. of connected units history 3 display
033 XXX

4-4. Operating hours display mode



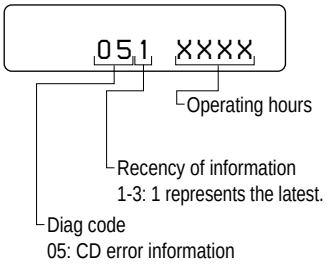
4-5. CD error information display mode
4-5-1. Error description



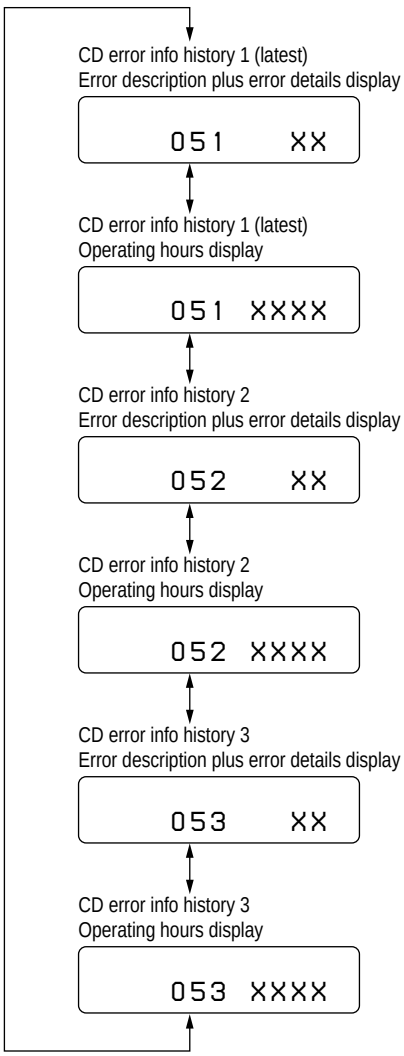
Error information

Indication	Description
1X	SERVO ERROR
3X	LOADING ERROR
4X	TRACK JUMP
5X	TEXT ERROR
FX	MECHA ERROR

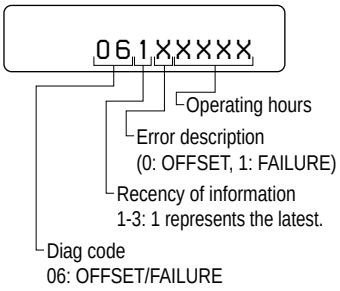
4-5-2. Operating hours



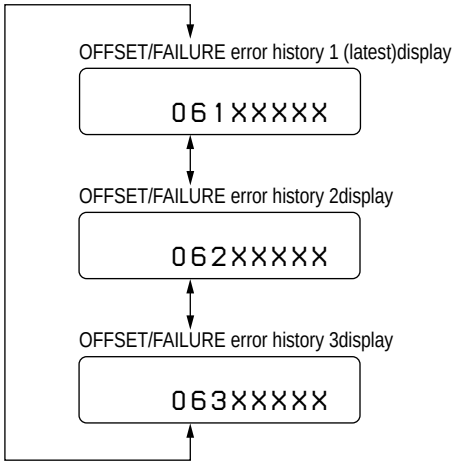
The display mode is switched by each rotation of [2/ALBM+] or [1/ALBM–] keys during the CD error information display mode.



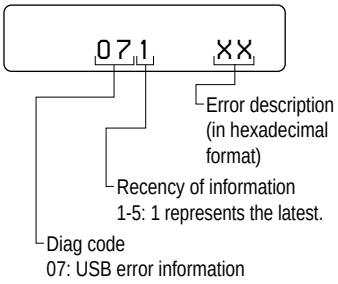
4-6. OFFSET/FAILURE error display mode



The display mode is switched by each rotation of [2/ALBM+] or [1/ALBM–] keys during the OFFSET/FAILURE error display mode.



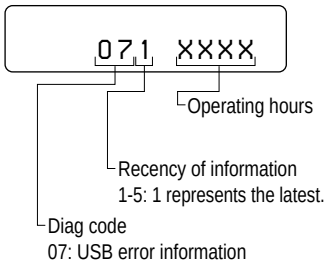
4-7. USB error information display mode
4-7-1. Error description



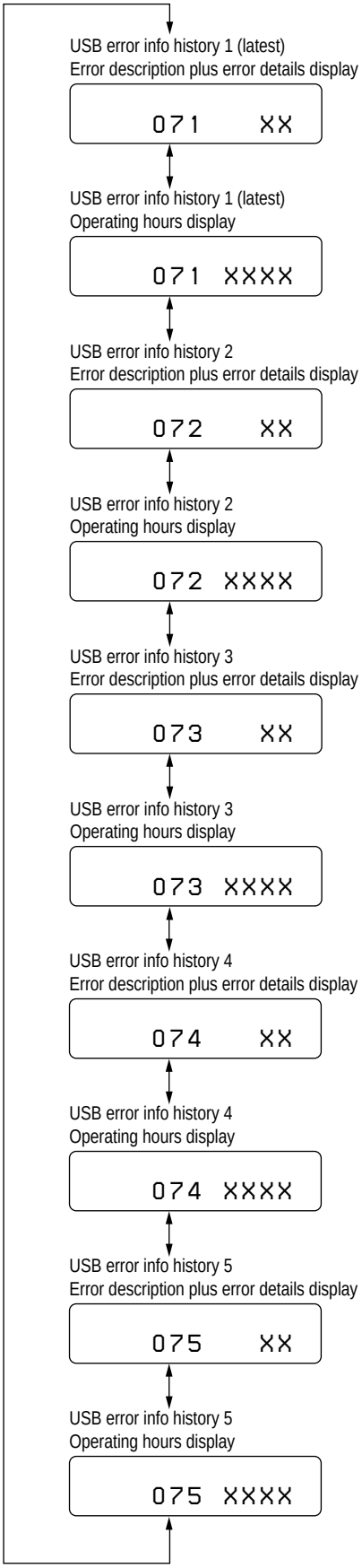
Error information

Indication	Description
15	DEVICE ERROR
17	FILE ERROR (NO MUSIC)
1E	POWER ON ERROR
1F	BOOT ERROR
3A	INVALID EJECT ERROR
43	READ ERROR
44	INVALID FORMAT FILE
FA	NOT SUPPORT DEVICE
FB	HUB NOT SUPPORT

4-7-2. Operating hours



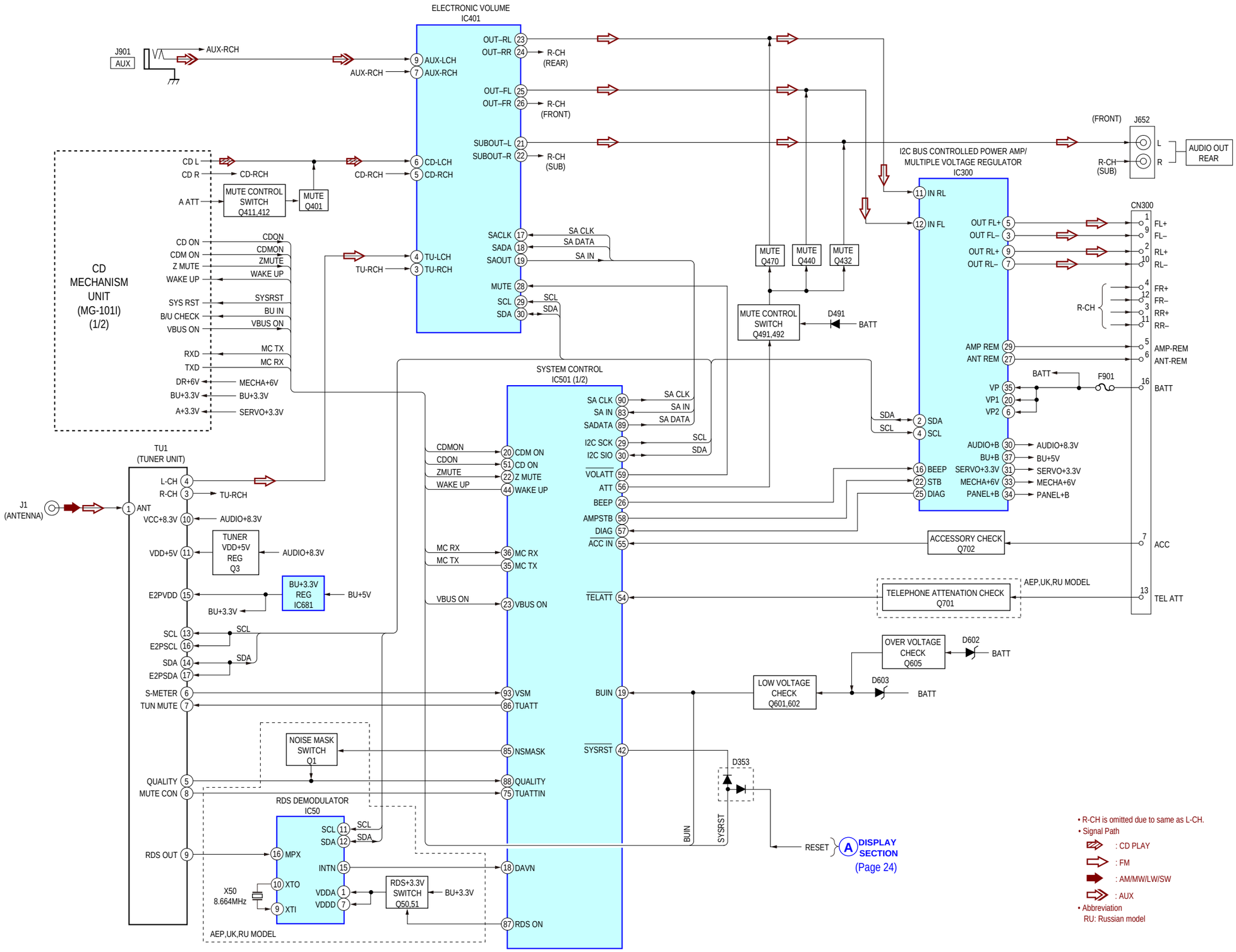
The display mode is switched by each rotation of [2/ALBM+] or [1/ALBM–] keys during the CD error information display mode.



MEMO

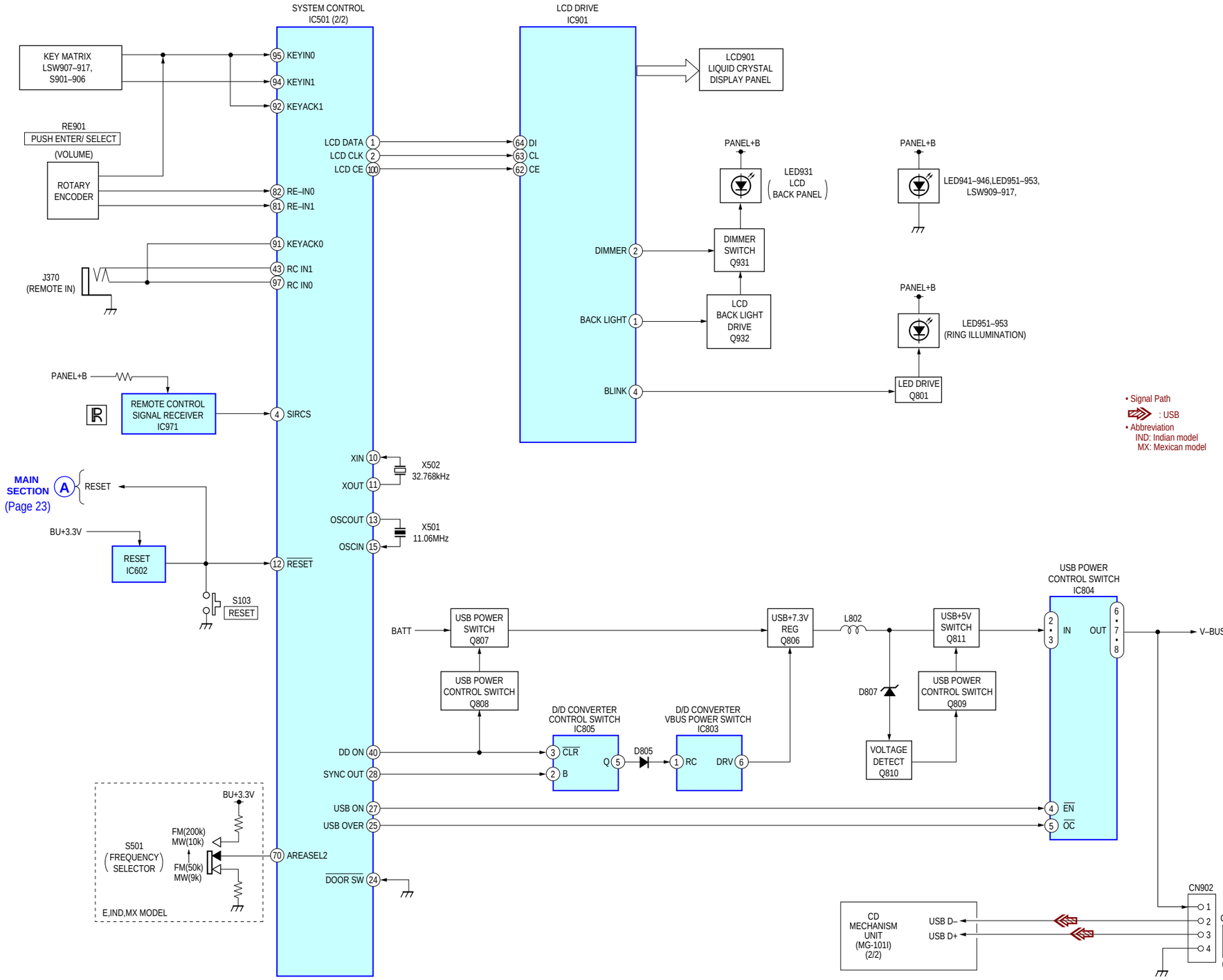
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM – MAIN Section –



- R-CH is omitted due to same as L-CH.
- Signal Path
  - : CD PLAY
  - : FM
  - : AM/MW/LW/SW
  - : AUX
- Abbreviation
  RU: Russian model

5-2. BLOCK DIAGRAM – DISPLAY Section –



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

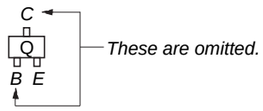
For Printed Wiring Boards.

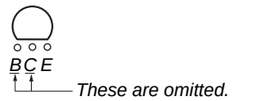
Note:

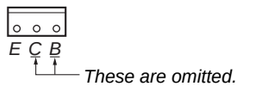
- ○——— : Parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▭ : Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.







- Abbreviation
  EA : Saudi Arabian model
  IND : Indian model
  MX : Mexican model
  RU : Russian model

For Schematic Diagrams.

Note:

- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ——— : B+ Line.
- - - - : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM/MW/LW/SW
  < > : CD PLAY
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇛ : CD PLAY
  ⇨ : FM
  ➡ : AM/MW/LW/SW
  ⇨ : AUX
  ⇛ : USB
- Abbreviation
  EA : Saudi Arabian model
  IND : Indian model
  MX : Mexican model
  RU : Russian model

- **Waveforms**

– MAIN Board –

① IC501 ⑩ (XIN)

0.2 V/DIV, 10 μsec/DIV

② IC501 ⑮ (OSC IN)

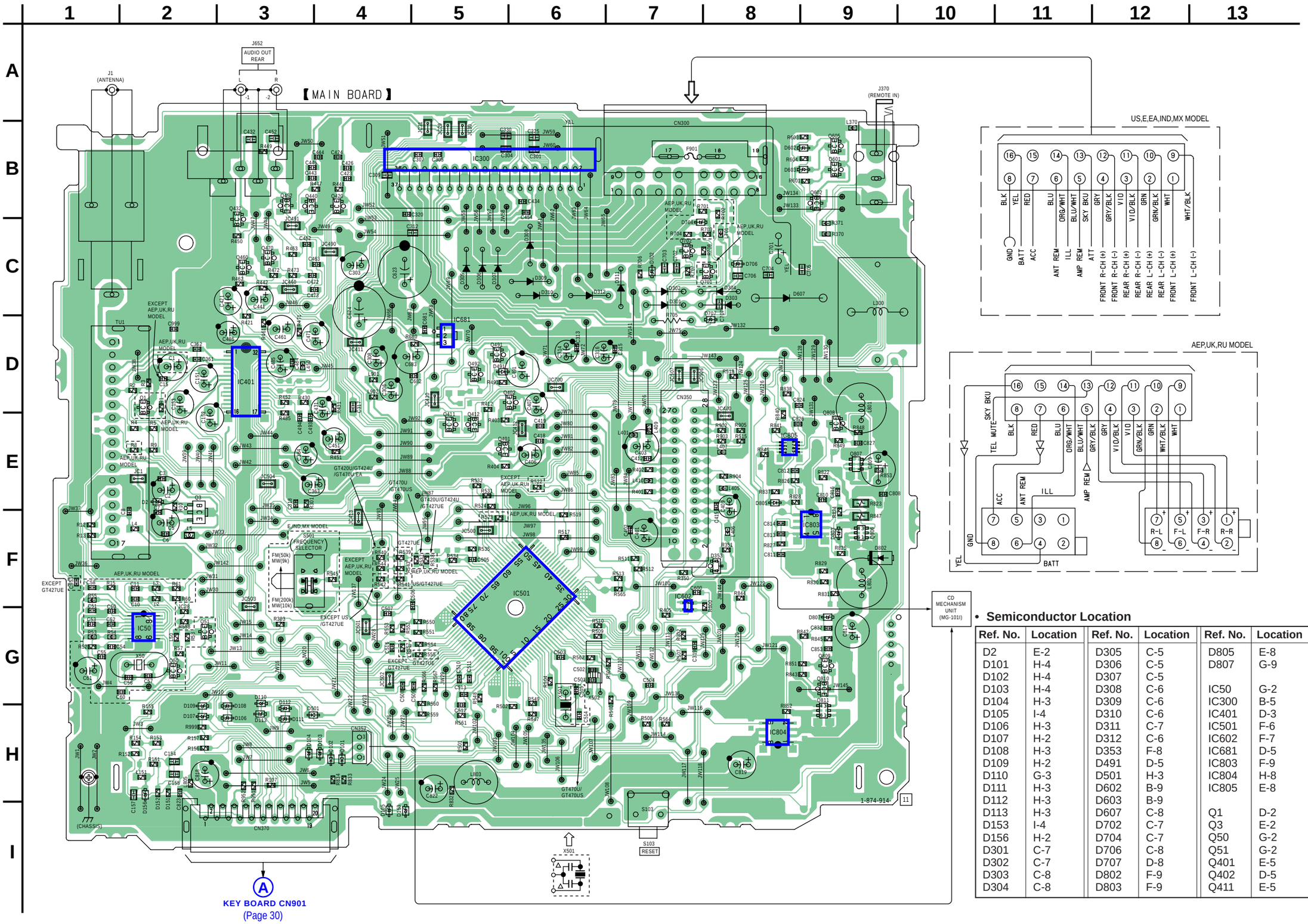
0.5 V/DIV, 0.1 μsec/DIV

③ IC50 ⑨ (XTI)

0.5 V/DIV, 0.1 μsec/DIV

5-3. PRINTED WIRING BOARD – MAIN Section –

• : Uses unleaded solder.



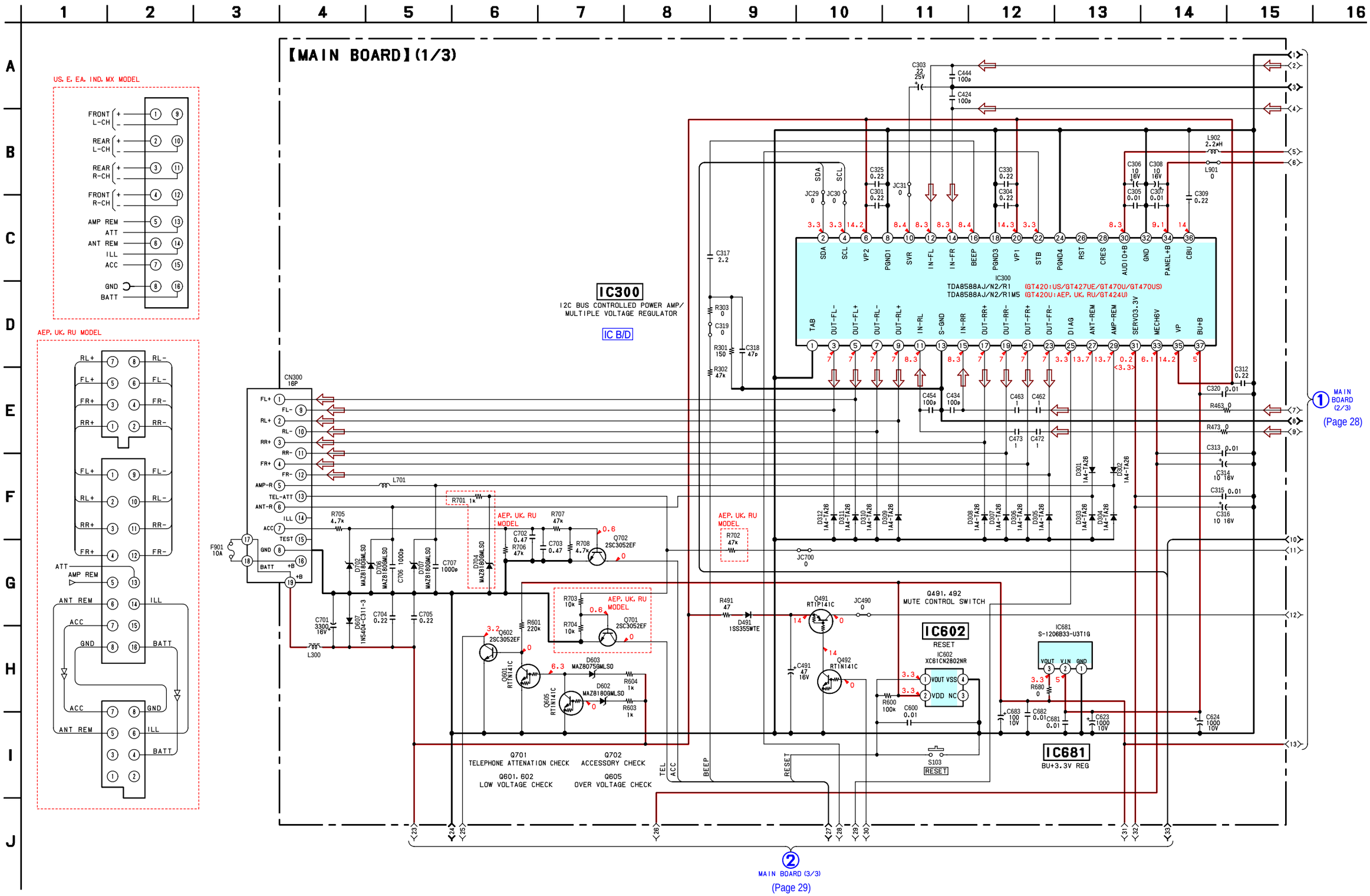
A
KEY BOARD CN901
(Page 30)

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D2	E-2	D305	C-5	D805	E-8	Q412	E-5
D101	H-4	D306	C-5	D807	G-9	Q420	B-4
D102	H-4	D307	C-5			Q432	B-3
D103	H-4	D308	C-6	IC50	G-2	Q440	B-3
D104	H-3	D309	C-6	IC300	B-5	Q452	B-3
D105	I-4	D310	C-6	IC401	D-3	Q460	C-3
D106	H-3	D311	C-7	IC501	F-6	Q470	C-3
D107	H-2	D312	C-6	IC602	F-7	Q491	D-5
D108	H-3	D353	F-8	IC681	D-5	Q492	D-5
D109	H-2	D491	D-5	IC803	F-9	Q601	B-9
D110	G-3	D501	H-3	IC804	H-8	Q602	B-9
D111	H-3	D602	B-9	IC805	E-8	Q605	B-9
D112	H-3	D603	B-9			Q701	C-8
D113	H-3	D607	C-8	Q1	D-2	Q702	C-7
D153	I-4	D702	C-7	Q3	E-2	Q806	F-9
D156	H-2	D704	C-7	Q50	G-2	Q807	E-9
D301	C-7	D706	C-8	Q51	G-2	Q808	E-9
D302	C-7	D707	D-8	Q401	E-5	Q809	G-9
D303	C-8	D802	F-9	Q402	D-5	Q810	G-9
D304	C-8	D803	F-9	Q411	E-5	Q811	H-9

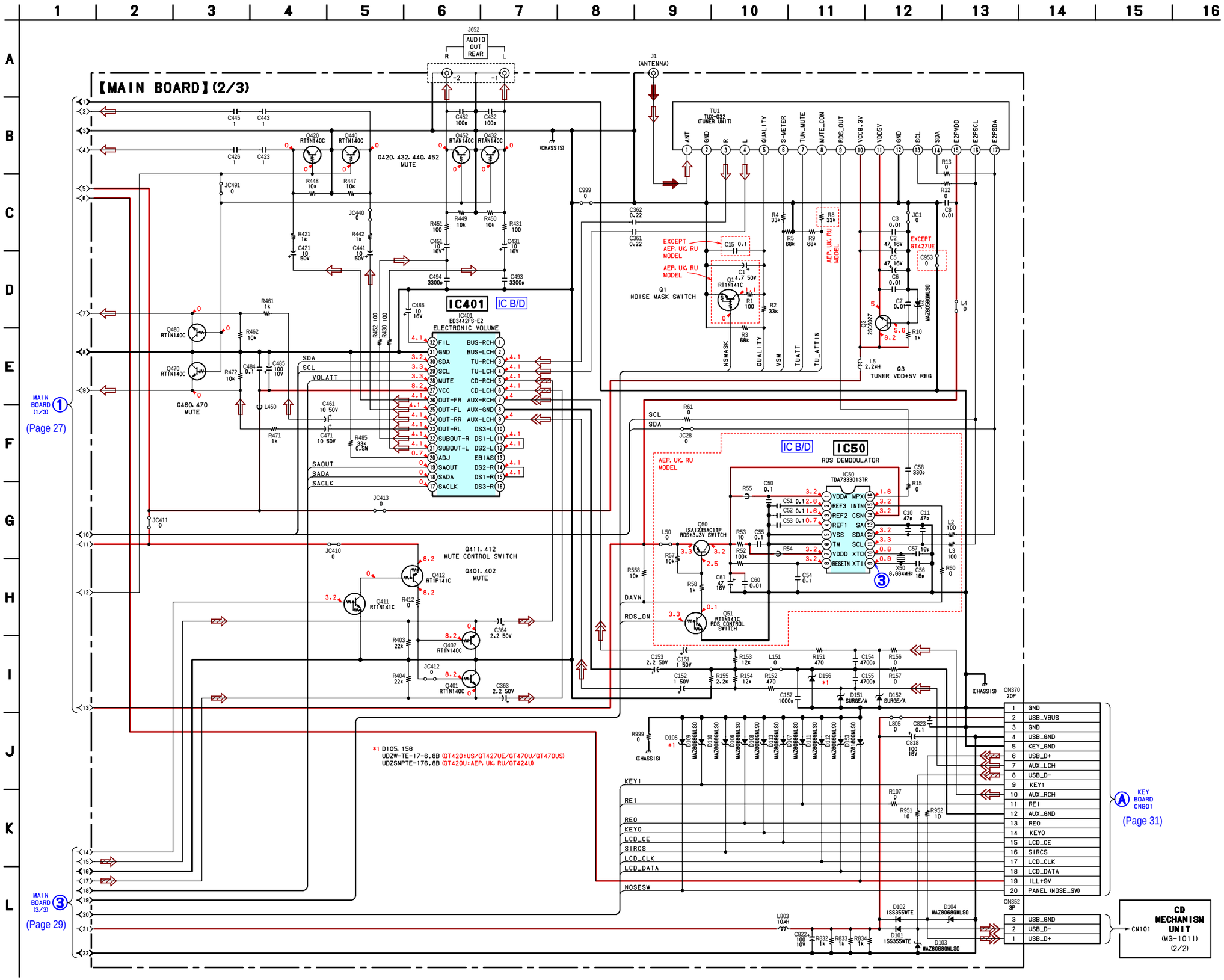
5-4. SCHEMATIC DIAGRAM – MAIN Section (1/3) –

• See page 32 for IC Block Diagram.


【MAIN BOARD】(1/3)
US. E. EA. IND. MX MODEL
AEP. UK. RU MODEL
FRONT L-CH
REAR L-CH
REAR R-CH
FRONT R-CH
AMP REM
ATT
ANT REM
ILL
ACC
GND
BATT
IC300
I2C BUS CONTROLLED POWER AMP/ MULTIPLE VOLTAGE REGULATOR
IC B/D
IC300
TDA8588AJ/N2/R1 (GT420:US/GT427UE/GT470U/GT470US)
TDA8588AJ/N2/R1M5 (GT420U:AEP, UK, RU/GT424U)
SDA SCL VP2 PGND1 SVR IN-FL IN-FR BEEP PGND3 VP1 STB PGND4 RST CRES AUDIO+B GND PANEL+B CBU
TAB OUT-FL- OUT-FL+ OUT-RL- OUT-RL+ IN-RL S-GND IN-RR OUT-RR+ OUT-RR- OUT-FR+ OUT-FR- DIAG ANT-REM AMP-REM SERV03.3V MECH6V VP BU+B
CN300 16P
FL+ FL- RL+ RL- RR+ RR- FR+ FR- AMP-R TEL-ATT ANT-R ILL ACC TEST GND BATT +B
AEP. UK. RU MODEL
Q701 TELEPHONE ATTENATION CHECK
Q702 ACCESSORY CHECK
Q601, 602 LOW VOLTAGE CHECK
Q605 OVER VOLTAGE CHECK
Q491, 492 MUTE CONTROL SWITCH
IC602 RESET
XC61CN2802NR
VOUT VSS VDD NC
IC681 S-1206B33-U3T1G
VOUT VIN GND
IC681 BU+3.3V REG
S103 RESET
TEL ACC BEEP RESET
① MAIN BOARD (2/3) (Page 28)
② MAIN BOARD (3/3) (Page 29)

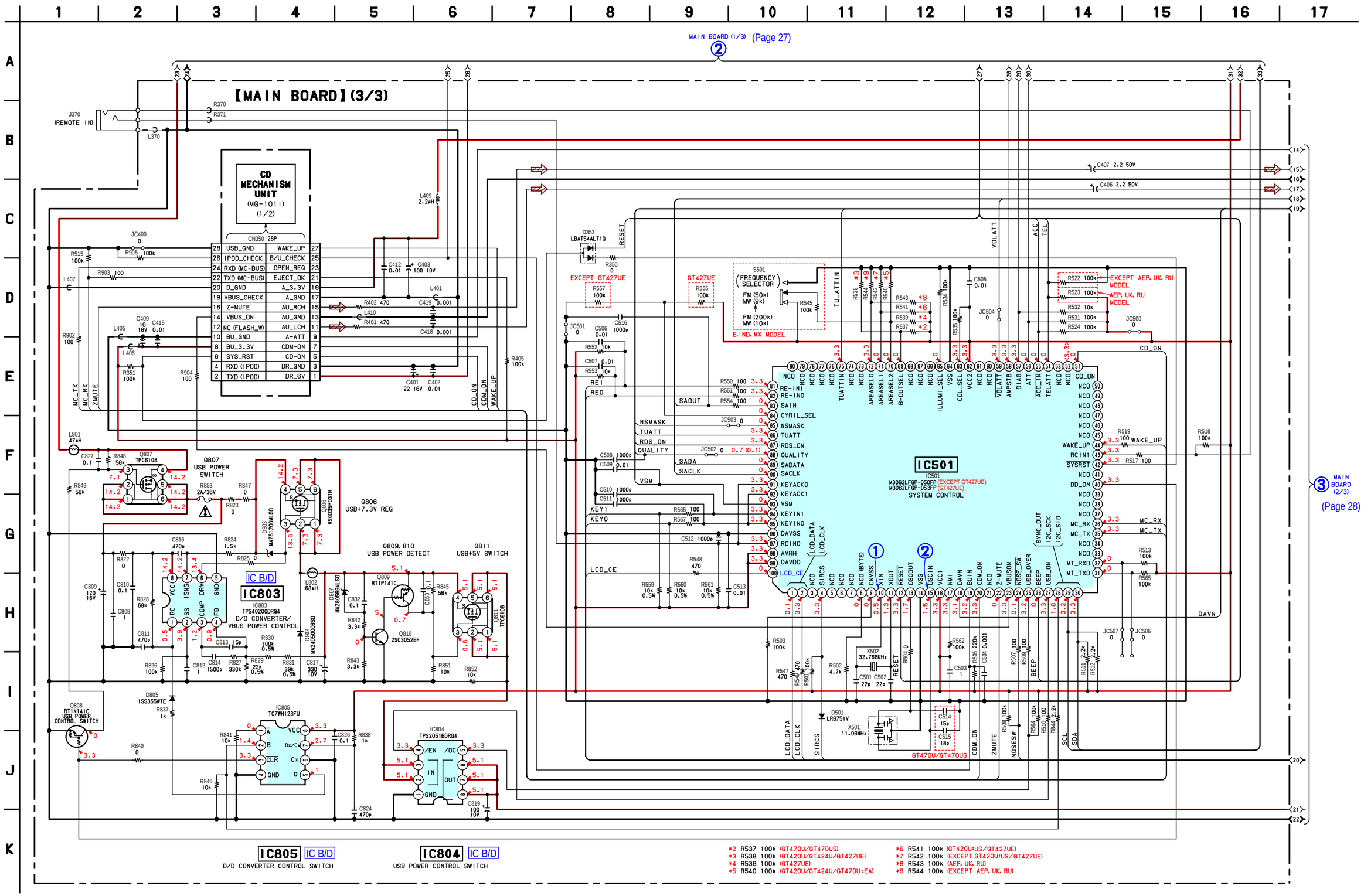
5-5. SCHEMATIC DIAGRAM – MAIN Section (2/3) –

• See page 25 for waveform. • See page 32 for IC Block Diagrams.



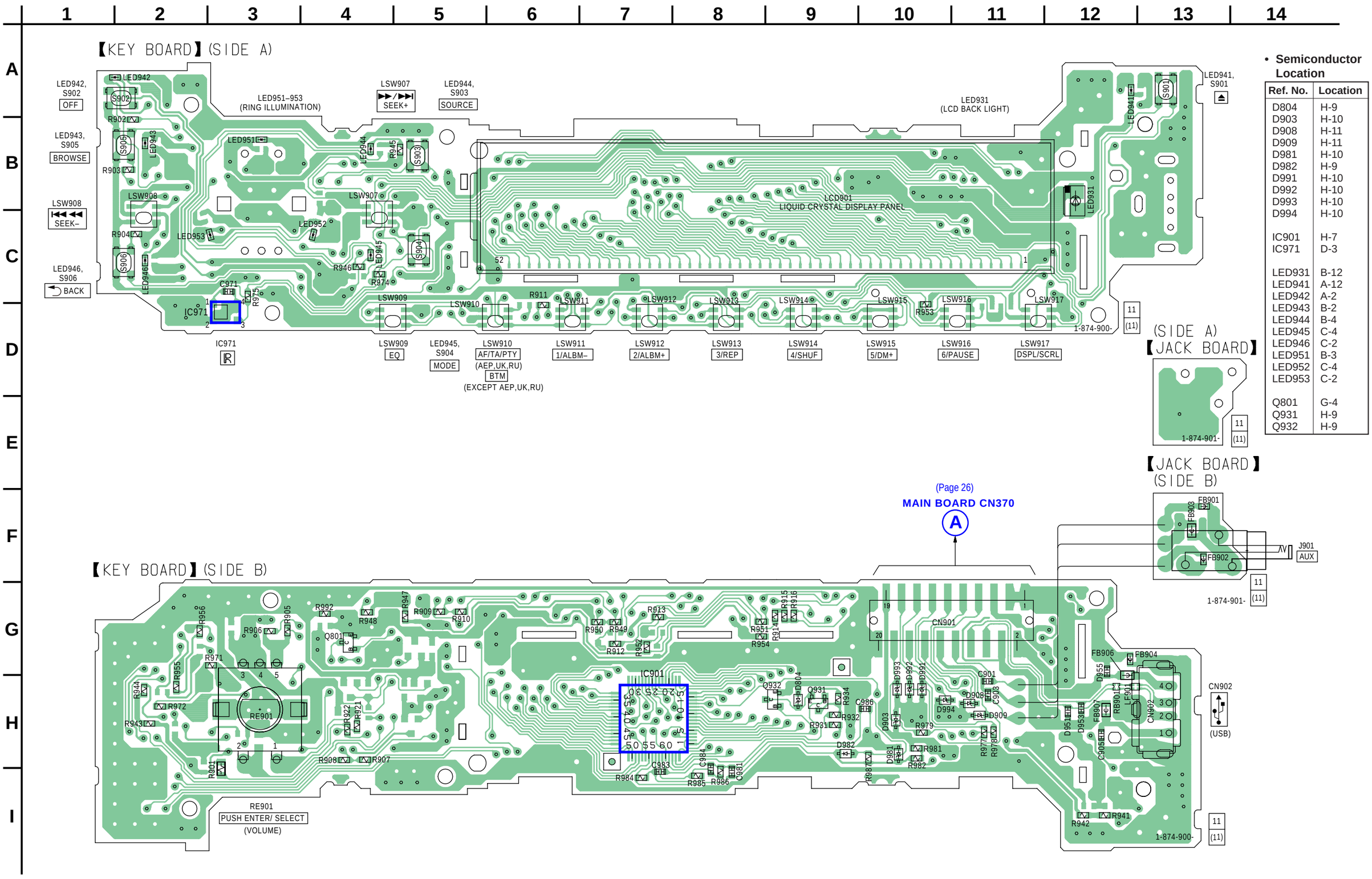
5-6. SCHEMATIC DIAGRAM – MAIN Section (3/3) –

• See page 25 for Waveforms. • See page 33 for IC Block Diagrams. • See page 34 for IC Pin Function Description of IC501.



5-7. PRINTED WIRING BOARDS – KEY Section –

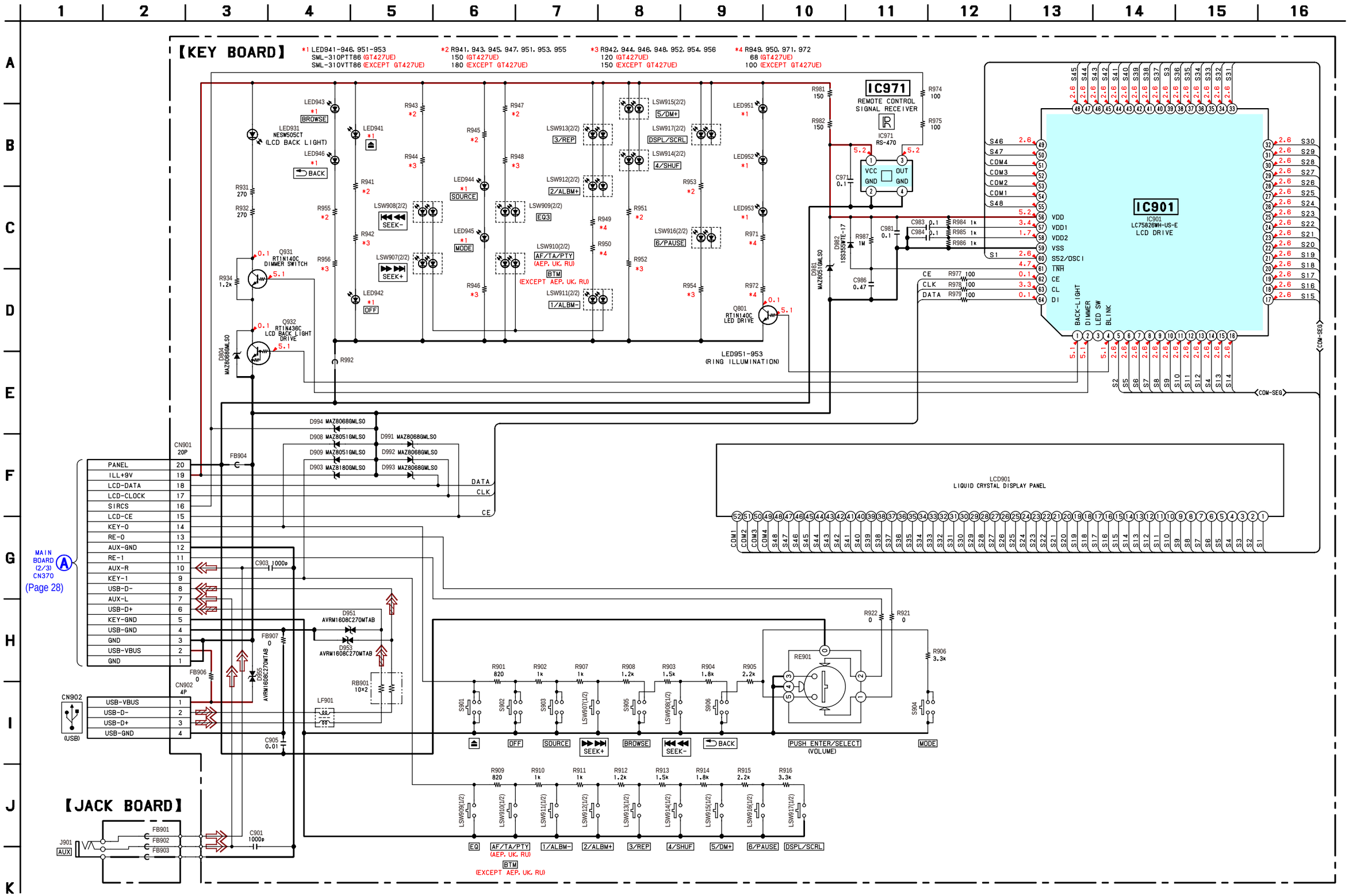
• : Uses unleaded solder.



• **Semiconductor Location**

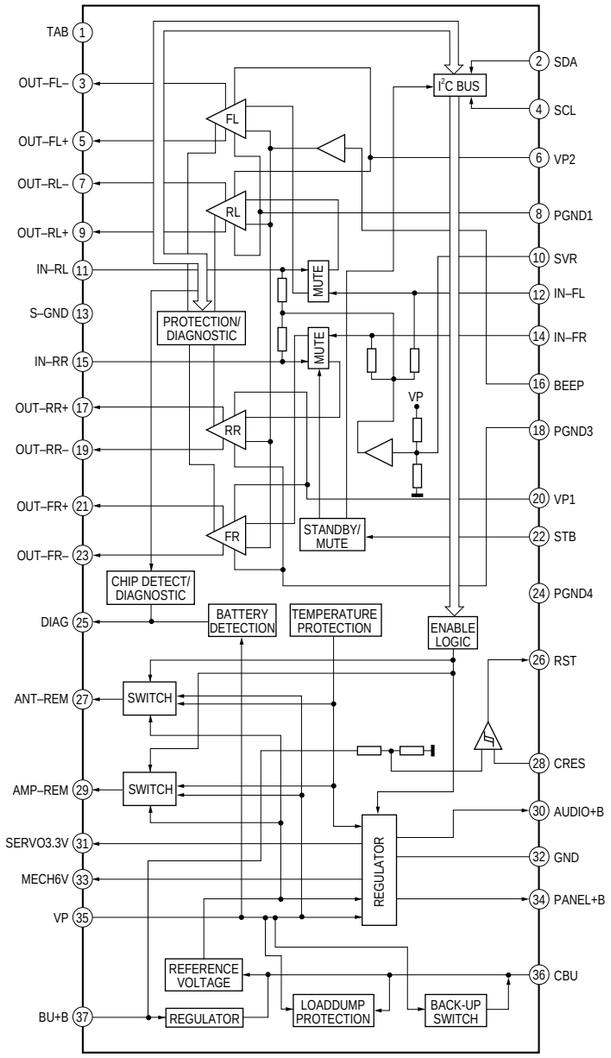
Ref. No.	Location
D804	H-9
D903	H-10
D908	H-11
D909	H-11
D981	H-10
D982	H-9
D991	H-10
D992	H-10
D993	H-10
D994	H-10
IC901	H-7
IC971	D-3
LED931	B-12
LED941	A-12
LED942	A-2
LED943	B-2
LED944	B-4
LED945	C-4
LED946	C-2
LED951	B-3
LED952	C-4
LED953	C-2
Q801	G-4
Q931	H-9
Q932	H-9

5-8. SCHEMATIC DIAGRAM – KEY Section –

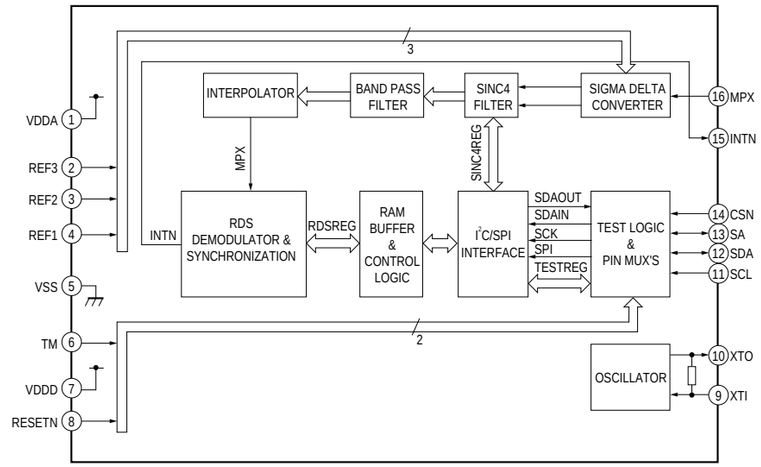


- **IC Block Diagrams**

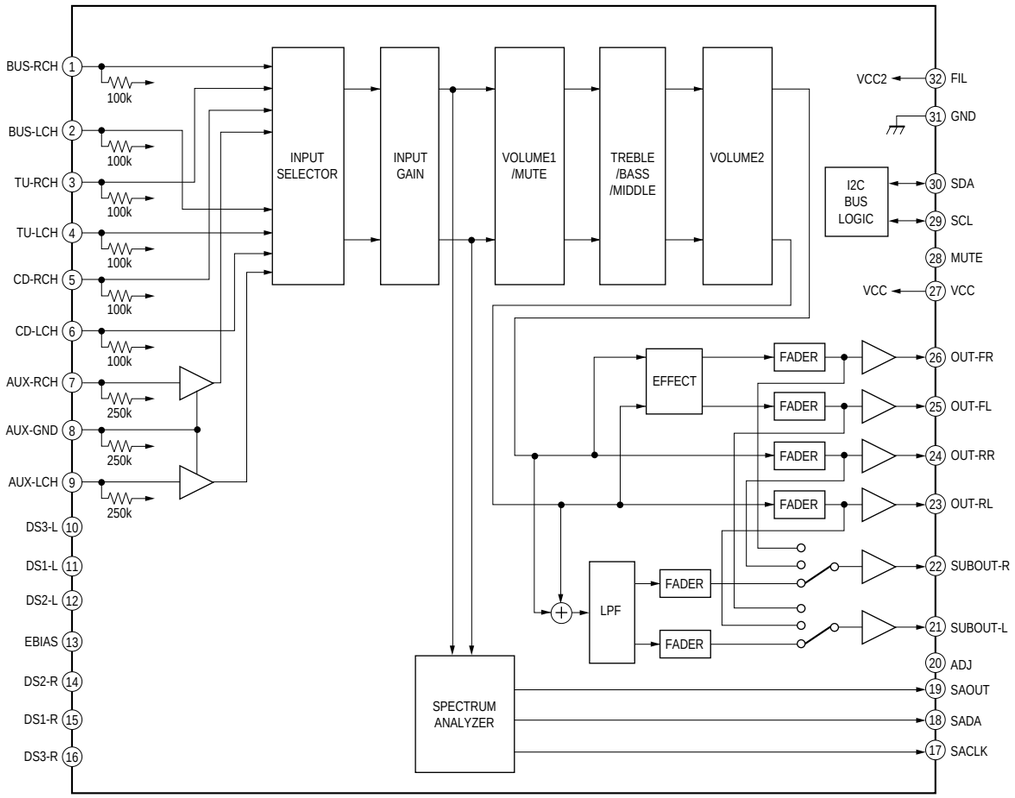
IC300 TDA8588AJ/N2/R1/M5 (GT420U: AEP, UK, RU/GT424U) (MAIN Board (1/3)) IC300 TDA8588AJ/N2/R1 (GT420U: US/GT427UE/GT470U/GT470US) (MAIN Board (1/3))



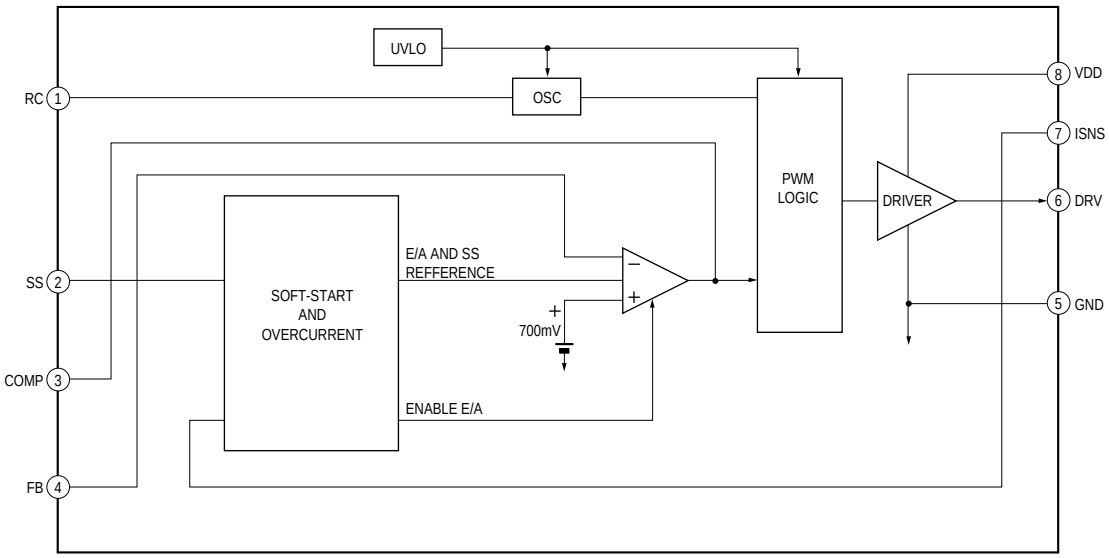
IC50 TDA7333013TR (AEP, UK, RU) (MAIN Board (2/3))



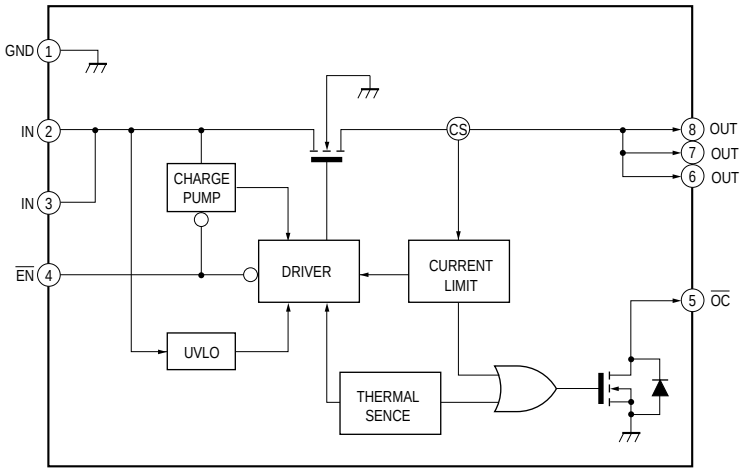
IC401 BD3442FS-E2 (MAIN Board (2/3))



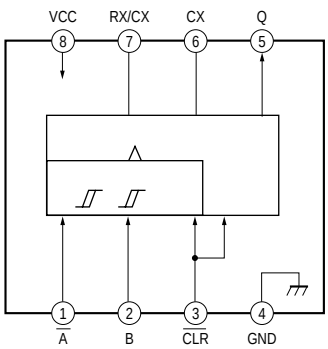
IC803 TPS40200DRG4 (MAIN Board (3/3))



IC804 TPS2051BDRG4 (MAIN Board (3/3))



IC805 TC7WH123FU(TE12R) (MAIN Board (3/3))



• **IC Pin Function Description**

MAIN BOARD IC501 M3062LFGP-050FP (SYSTEM CONTROL) (EXCEPT GT427UE)
MAIN BOARD IC501 M3062LFGP-053FP (SYSTEM CONTROL) (GT427UE)

Pin No.	Pin Name	I/O	Description
1	LCD DATA	O	Liquid crystal display panel serial data signal output
2	LCD CLK	O	Liquid crystal display panel serial clock signal output
3	NCO	O	Not used. (Open)
4	SIRCS	I	Remote control signal input
5 to 7	NCO	O	Not used. (Open)
8	NCO (BYTE)	I	Connect to ground. (Pull down)
9	CNVSS	I	Flash write signal input Normally operation: “L”, Flash write: “H”
10	XIN	I	Low speed operation clock signal input (32.768kHz)
11	XOUT	O	Low speed operation clock signal output (32.768kHz)
12	$\overline{\text{RESET}}$	I	Reset signal input
13	OSCOUT	O	High speed operation clock signal output (11.06MHz)
14	VSS	—	Ground pin
15	OSCIN	I	High speed operation clock signal input (11.06MHz)
16	VCC1	—	Power supply pin (+3.3V)
17	NMI	I	External pull up pin (fixed at “H”.)
18	DAVN	I	RDS data block cycle detection signal input
19	BUIN	I	Back up power supply detection signal input
20	CDM ON	I	CD mechanism deck power supply control request signal input
21	NCO	O	Not used. (Open)
22	Z MUTE	I	Mute signal input
23	VBUSON	I	VBUS power supply control signal input “H”: VBUS on, “L”: VBUS off
24	$\overline{\text{NOSE SW}}$	I	Front panel attachment detection signal input
25	USB OVER	I	USB over current detection signal input
26	BEEP	O	Beep signal output to power amplifier
27	USB ON	O	USB over current detection IC control signal output
28	SYNC OUT	O	DC/DC converter oscillation frequency control signal output
29	I2C SCK	O	I2C serial clock signal output
30	I2C SIO	I/O	I2C serial data signal input/output
31	MT TXD	O	Flash write interface serial data signal output
32	MT RXD	I	Flash write interface serial data signal input
33, 34	NCO	O	Not used. (Open)
35	MC TX	O	MC-BUS communication and mechanism IC communication TX output
36	MC RX	I	MC-BUS communication and mechanism IC communication RX input
37 to 39	NCO	O	Not used. (Open)
40	DD ON	O	DC/DC converter power supply on/off control signal output
41	NCO	O	Not used. (Open)
42	SYSRST	O	System reset signal output
43	RCIN1	I	Rotary commander shift key signal input
44	WAKE UP	O	Mechanism IC wake up signal output
45 to 50	NCO	O	Not used. (Open)
51	CD ON	I	CD mechanism servo power supply control request signal input
52	NCO	O	Not used. (Open)
53	NCO	O	Not used. (Open)
54	TEL ATT	I	Telephone attenuate detection signal input
55	$\overline{\text{ACC IN}}$	I	Accessory power supply detection signal input
56	ATT	O	Audio mute control signal output
57	DIAG	I	Condition signal input from power amplifier IC
58	AMPSTB	O	Standby signal output to power regulator IC
59	$\overline{\text{VOLATT}}$	O	Electrical volume attenuate control signal output
60, 61	NCO	O	Not used. (Open)
62	VCC2	—	Power supply pin (+3.3V)
63	COL SEL	I	Key illumination two colors change setting signal input “L”: two colors
64	VSS	—	Ground pin

Pin No.	Pin Name	I/O	Description
65	ILLUMI SEL	I	Illumination voltage setting signal input for panel “H”: 10.4V, “L”: 9V
66 to 68	NCO	O	Not used. (Open)
69	B OUTSEL	I	Black out setting signal input “H”: Block out
70	AREASEL 2	I	Destination setting pin 2
71	AREASEL 1	I	Destination setting pin 1
72	AREASEL 0	I	Destination setting pin 0
73, 74	NCO	O	Not used. (Open)
75	TUATTIN	I	Tuner mute zero cross detection signal input
76 to 80	NCO	O	Not used. (Open)
81	RE IN1	I	Rotary encoder signal input 1
82	RE IN0	I	Rotary encoder signal input 0
83	SA IN	I	Spectrum analyzer signal input
84	CYRIL SEL	I	Cyril select signal input “H”: Cyril select
85	NSMASK	O	Noise mask signal output
86	TUATT	O	Tuner mute control signal output
87	RDS ON	O	RDS IC power supply control signal output
88	QUALITY	I	Noise detection signal input
89	SADATA	O	Spectrum analyzer data signal output
90	SACLK	O	Spectrum analyzer clock signal output
91	KEYACK0	I	Key Acknowledge detection signal input (Rotary command signal input)
92	KEYACK1	I	Key Acknowledge detection signal input (Front panel signal input)
93	VSM	I	S meter voltage detection signal input
94	KEYIN1	I	Key signal input 1
95	KEYIN0	I	Key signal input 0
96	DAVSS	—	Ground pin for A/D converter
97	RCIN0	I	Rotary commander key signal input
98	AVRH	—	A/D converter external reference power supply pin (+3.3V)
99	DAVDD	—	A/D converter power supply pin (+3.3V)
100	LCD CE	O	Liquid crystal display panel chip enable signal output

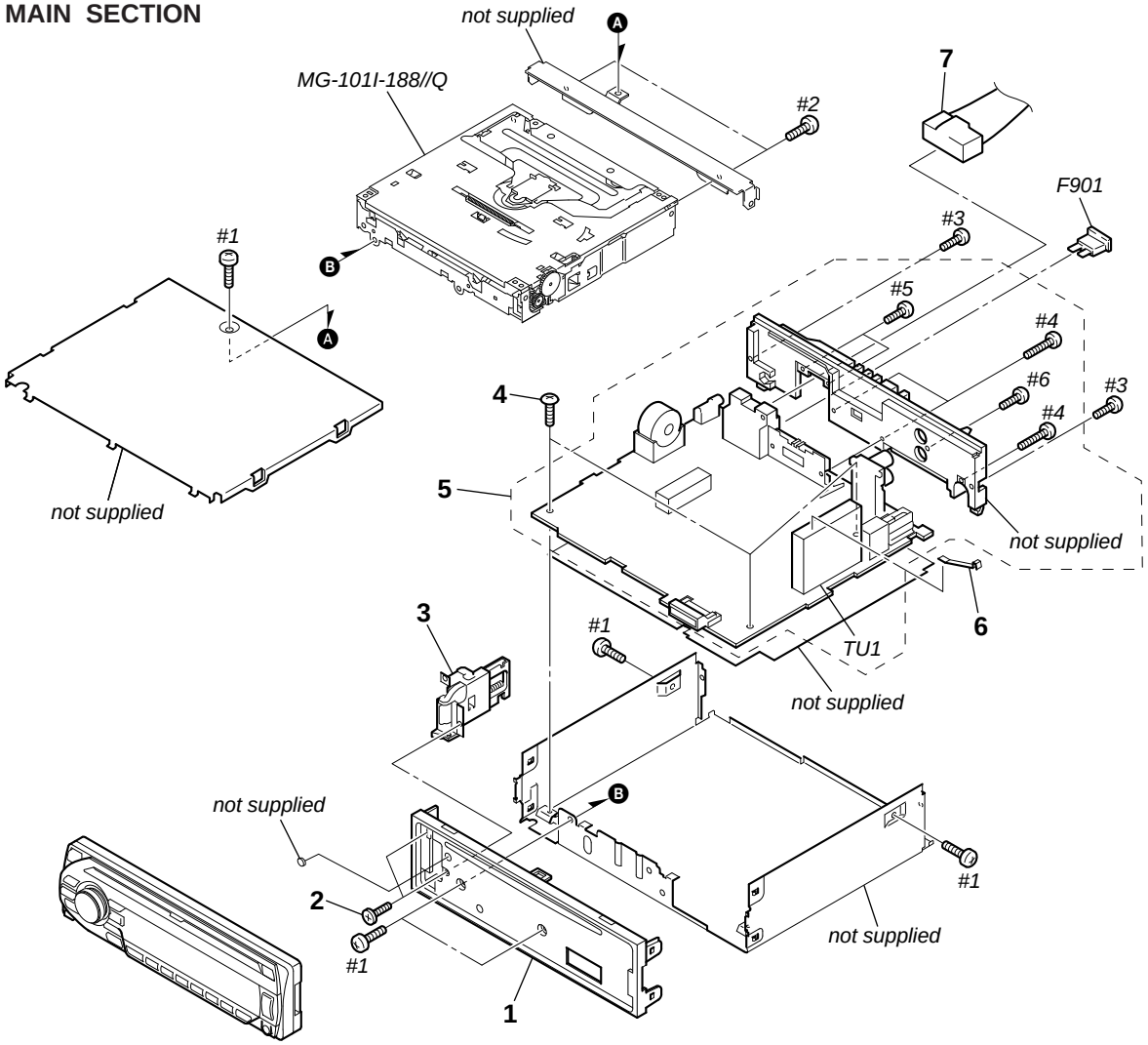
SECTION 6
EXPLODED VIEWS

Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- Abbreviation
  EA : Saudi Arabian model
  IND : Indian model
  MX : Mexican model
  RU : Russian model
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of the electrical parts list.

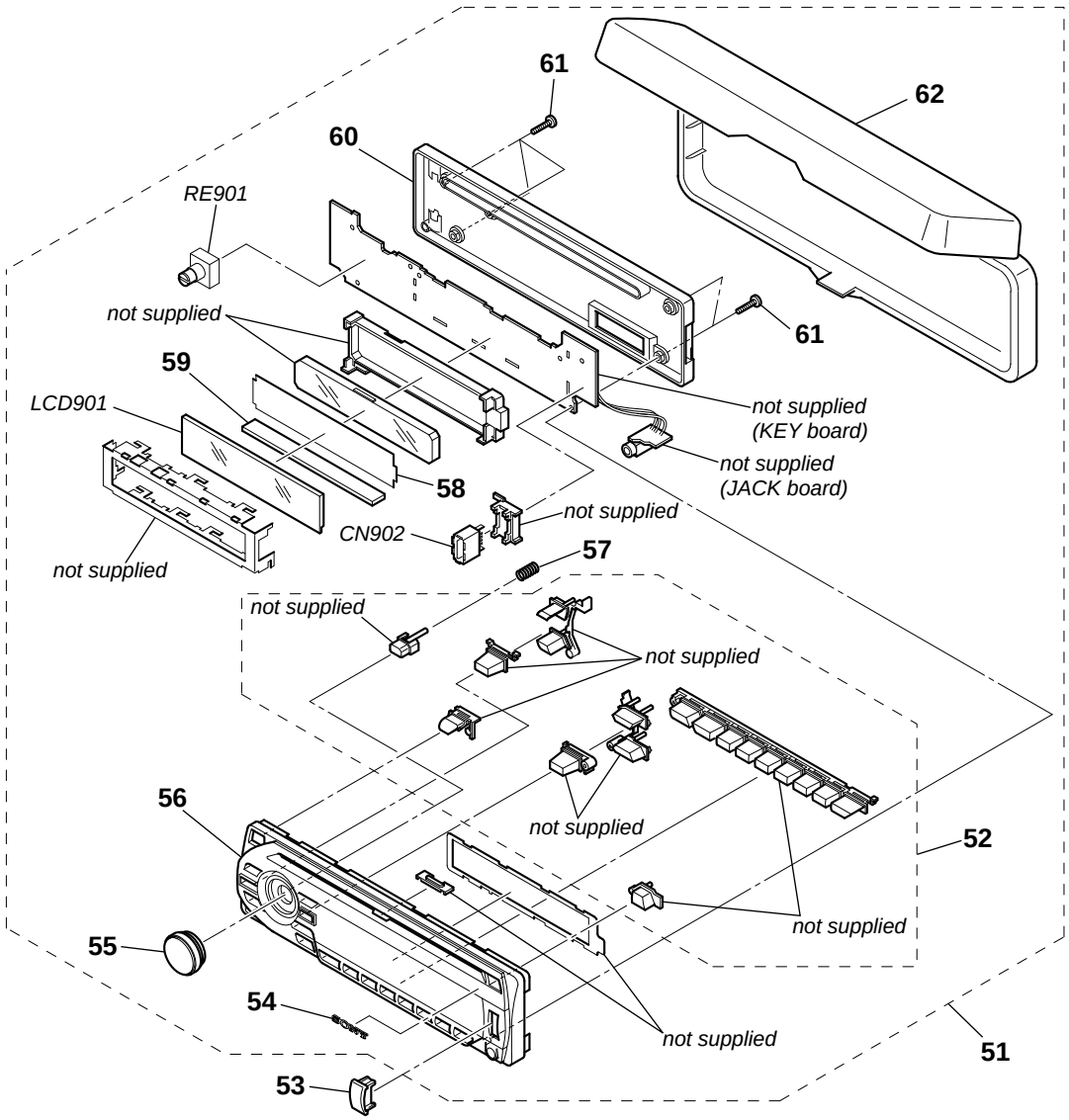
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	X-2179-750-1	PANEL ASSY, SUB	
2	3-042-244-11	SCREW (T)	
3	X-2179-399-1	LOCK ASSY (S)	
4	2-050-124-01	SCREW +BTT 2.6X5	
5	A-1363-643-A	MAIN BOARD, COMPLETE (GT420U:AEP,UK,RU/GT424U)	
5	A-1366-526-A	MAIN BOARD, COMPLETE (GT470U:E,IND/GT470US)	
5	A-1367-679-A	MAIN BOARD, COMPLETE (GT427UE)	
5	A-1367-703-A	MAIN BOARD, COMPLETE (GT420U:US)	
5	A-1368-026-A	MAIN BOARD, COMPLETE (GT470U:EA)	
6	2-021-848-01	SHEET (TU), GROUND	
7	1-831-838-11	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK,RU)	
7	1-833-762-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (for Maruti Suzuki:Gasoline Car)	
7	1-833-974-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (EXCEPT AEP,UK,RU)	
7	1-834-307-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (for Maruti Suzuki:Diesel Car)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU1	A-3220-960-B	TUNER UNIT (TUX-032) (GT470U/GT470US)	
TU1	A-3220-961-B	TUNER UNIT (TUX-032) (GT420U/GT424U/GT427UE)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#6	7-621-284-40	SCREW +P 2.6X10	

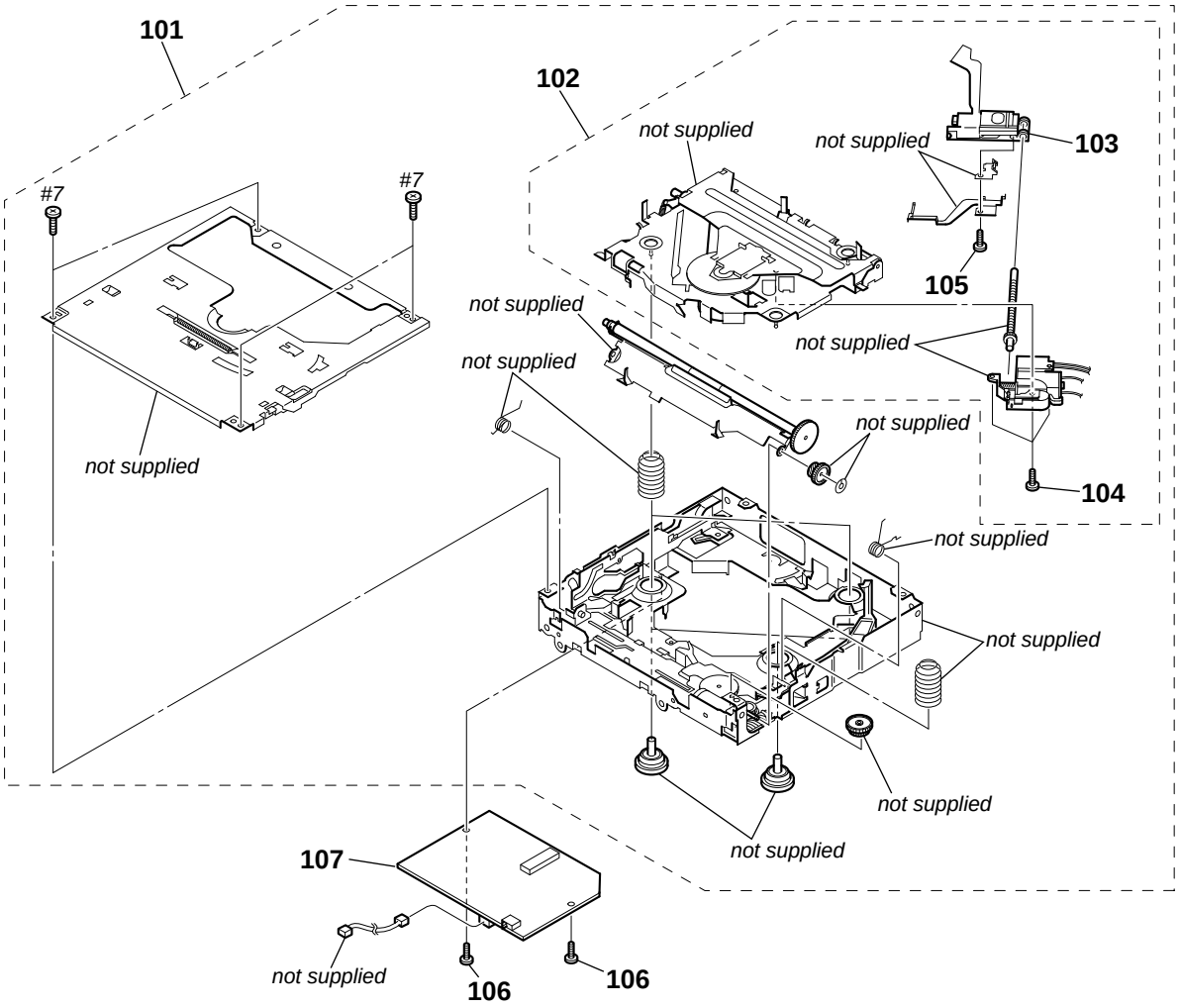
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-1363-645-A	PANEL COMPLETE ASSY, FRONT (GT420U:AEP,UK,RU)	
51	A-1366-474-A	PANEL COMPLETE ASSY, FRONT (GT424U)	
51	A-1366-528-A	PANEL COMPLETE ASSY, FRONT (GT470US)	
51	A-1367-113-A	PANEL COMPLETE ASSY, FRONT (GT470U)	
51	A-1367-681-A	PANEL COMPLETE ASSY, FRONT (GT427UE)	
51	A-1367-705-A	PANEL COMPLETE ASSY, FRONT (GT420U:US)	
52	X-2186-947-1	BUTTON ASSY (S) (GT420U:AEP,UK,RU)	
52	X-2187-114-1	BUTTON ASSY (S) (GT424U/GT427UE)	
52	X-2187-119-1	BUTTON ASSY (S) (GT470US)	
52	X-2187-139-1	BUTTON ASSY (S) (GT420U:US/GT470U)	
53	X-2176-322-1	CAP (USB) ASSY	
54	3-251-320-01	EMBLEM (NO. 2.5), SONY	
55	X-2186-948-1	KNOB (VOL) (SV) ASSY	
56	X-2186-949-1	PANEL (SV) ASSY, FRONT (GT420U:AEP,UK,RU)	

Ref. No.	Part No.	Description	Remark
56	X-2187-115-1	PANEL (SV) ASSY, FRONT (GT424U)	
56	X-2187-120-1	PANEL (SV) ASSY, FRONT (GT470US)	
56	X-2187-140-1	PANEL (SV) ASSY, FRONT (GT470U)	
56	X-2187-150-1	PANEL (SV) ASSY, FRONT (GT427UE)	
56	X-2187-153-1	PANEL (SV) ASSY, FRONT (GT420U:US)	
57	2-639-881-01	SPRING (RELEASE)	
58	3-214-259-11	ILLUMINATOR (LCD)	
59	1-780-533-21	CONDUCTIVE BOARD, CONNECTION	
60	3-269-027-01	PANEL (USB), BACK	
61	3-250-543-21	SCREW (+B P-TITE M2)	
62	X-2187-544-1	CASE ASSY (for FRONT PANEL) (EXCEPT US)	
CN902	1-820-877-11	CONNECTOR, USB (SOCKET) (USB)	
LCD901	1-802-569-11	DISPLAY PANEL, LIQUID CRYSTAL	
RE901	1-479-902-21	ENCODER, ROTARY (PUSH ENTER/SELECT/VOLUME)	

6-3. CD MECHANISM SECTION (MG-101I-188//Q)



Ref. No.	Part No.	Description	Remark
101	A-1313-179-A	MECHANICAL BLOCK (U) ASSY (08)	
102	A-1284-705-A	DAXEV08//Q	
⚠ 103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)	
104	2-626-869-01	SCREW (M2X3), SERRATION	
105	3-348-998-31	SCREW (M1.4X2.5), TAPPING, PAN	
106	3-352-758-31	SCREW (M1.7X2.5), TOOTHED LOCK	
107	A-1362-921-A	SERVO BOARD, COMPLETE	
#7	7-627-000-08	SCREW, PRECISION +P 1.7X2.2 TYPE3	

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . , uPA. . , µPA. . ,
  uPB. . : µPB. . , uPC. . , µPC. . ,
  uPD. . : µPD. .
- Abbreviation
  EA : Saudi Arabia model
  IND : Indian model
  MX : Mexican model
  RU : Russian model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		JACK BOARD	
		**********	
		< FERRITE BEAD >	
FB901	1-469-179-21	INDUCTOR, FERRITE BEAD	
FB902	1-469-179-21	INDUCTOR, FERRITE BEAD	
FB903	1-414-671-22	INDUCTOR, FERRITE BEAD	
		< JACK >	
J901	1-819-732-21	JACK (DIA.3.5) (AUX)	
		KEY BOARD	
		*********	
	1-780-533-21	CONDUCTIVE BOARD, CONNECTION	
	3-214-259-11	ILLUMINATOR (LCD)	
		< CAPACITOR >	
C901	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C903	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C905	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C971	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C981	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C983	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C984	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C986	1-125-891-11	CERAMIC CHIP 0.47uF 10% 10V	
		< CONNECTOR >	
CN901	1-820-619-11	PLUG, CONNECTOR 20P	
CN902	1-820-877-11	CONNECTOR, USB (SOCKET) (USB)	
		< DIODE >	
D804	6-501-743-01	DIODE MAZ8068GMLS0	
D903	6-501-782-01	DIODE MAZ8180GMLS0	
D908	6-501-730-01	DIODE MAZ8051GMLS0	
D909	6-501-730-01	DIODE MAZ8051GMLS0	
D951	1-804-988-21	VARISTOR, CHIP (1608)	
D953	1-804-988-21	VARISTOR, CHIP (1608)	
D955	1-804-988-21	VARISTOR, CHIP (1608)	
D981	6-501-730-01	DIODE MAZ8051GMLS0	
D982	6-501-193-01	DIODE 1SS355WTE-17	
D991	6-501-743-01	DIODE MAZ8068GMLS0	
D992	6-501-743-01	DIODE MAZ8068GMLS0	
D993	6-501-743-01	DIODE MAZ8068GMLS0	
D994	6-501-743-01	DIODE MAZ8068GMLS0	

Ref. No.	Part No.	Description	Remark
		< FERRITE BEAD >	
FB904	1-469-876-11	INDUCTOR, FERRITE BEAD	
FB906	1-216-295-11	SHORT CHIP 0	
FB907	1-216-295-11	SHORT CHIP 0	
		< IC >	
IC901	6-707-063-01	IC LC75826WH-US-E	
IC971	6-600-629-01	IC RS-470 (IR)	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-802-569-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< DIODE >	
LED931	6-501-339-01	LED NESW505CT-AST (LCD BACK LIGHT)	
LED941	8-719-053-09	LED SML-310VTT86 (⏏) (EXCEPT GT427UE)	
LED941	8-719-078-21	LED SML-310PTT86 (⏏) (GT427UE)	
LED942	8-719-053-09	LED SML-310VTT86 (OFF)	(EXCEPT GT427UE)
LED942	8-719-078-21	LED SML-310PTT86 (OFF) (GT427UE)	
LED943	8-719-053-09	LED SML-310VTT86 (BROWSE)	(EXCEPT GT427UE)
LED943	8-719-078-21	LED SML-310PTT86 (BROWSE) (GT427UE)	
LED944	8-719-053-09	LED SML-310VTT86 (SOURCE)	(EXCEPT GT427UE)
LED944	8-719-078-21	LED SML-310PTT86 (SOURCE) (GT427UE)	
LED945	8-719-053-09	LED SML-310VTT86 (MODE)	(EXCEPT GT427UE)
LED945	8-719-078-21	LED SML-310PTT86 (MODE) (GT427UE)	
LED946	8-719-053-09	LED SML-310VTT86 (BACK)	(EXCEPT GT427UE)
LED946	8-719-078-21	LED SML-310PTT86 (BACK) (GT427UE)	
LED951	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATION)	(EXCEPT GT427UE)
LED951	8-719-078-21	LED SML-310PTT86 (RING ILLUMINATION)	(GT427UE)
LED952	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATION)	(EXCEPT GT427UE)
LED952	8-719-078-21	LED SML-310PTT86 (RING ILLUMINATION)	(GT427UE)
LED953	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATION)	(EXCEPT GT427UE)
LED953	8-719-078-21	LED SML-310PTT86 (RING ILLUMINATION)	(GT427UE)
		< COIL >	
LF901	1-457-223-11	COIL, COMMON MODE CHOKE	

KEY

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
LSW907	1-786-805-13	SWITCH, TACTILE (WITH LED) (▶▶ ▶▶I /SEEK+)	(EXCEPT GT427UE)
LSW907	1-786-806-13	SWITCH, TACTILE (WITH LED) (▶▶ ▶▶I /SEEK+)	(GT427UE)
LSW908	1-786-805-13	SWITCH, TACTILE (WITH LED) (I◀◀ ◀◀ /SEEK–)	(EXCEPT GT427UE)
LSW908	1-786-806-13	SWITCH, TACTILE (WITH LED) (I◀◀ ◀◀ /SEEK–)	(GT427UE)
LSW909	1-786-805-13	SWITCH, TACTILE (WITH LED) (EQ3)	(EXCEPT GT427UE)
LSW909	1-786-806-13	SWITCH, TACTILE (WITH LED) (EQ3)	(GT427UE)
LSW910	1-786-805-13	SWITCH, TACTILE (WITH LED) (BTM)	(GT420:US/GT470U/GT470US)
LSW910	1-786-805-13	SWITCH, TACTILE (WITH LED) (AF/TA/PTY)	(GT420:AEP,UK,RU/GT424U)
LSW910	1-786-806-13	SWITCH, TACTILE (WITH LED) (AF/TA/PTY)	(GT427UE)
LSW911	1-786-805-13	SWITCH, TACTILE (WITH LED) (1/ALBM –)	(EXCEPT GT427UE)
LSW911	1-786-806-13	SWITCH, TACTILE (WITH LED) (1/ALBM –)	(GT427UE)
LSW912	1-786-805-13	SWITCH, TACTILE (WITH LED) (2/ALBM +)	(EXCEPT GT427UE)
LSW912	1-786-806-13	SWITCH, TACTILE (WITH LED) (2/ALBM +)	(GT427UE)
LSW913	1-786-805-13	SWITCH, TACTILE (WITH LED) (3/REP)	(EXCEPT GT427UE)
LSW913	1-786-806-13	SWITCH, TACTILE (WITH LED) (3/REP)	(GT427UE)
LSW914	1-786-805-13	SWITCH, TACTILE (WITH LED) (4/SHUF)	(EXCEPT GT427UE)
LSW914	1-786-806-13	SWITCH, TACTILE (WITH LED) (4/SHUF)	(GT427UE)
LSW915	1-786-805-13	SWITCH, TACTILE (WITH LED) (5/DM+)	(EXCEPT GT427UE)
LSW915	1-786-806-13	SWITCH, TACTILE (WITH LED) (5/DM+)	(GT427UE)
LSW916	1-786-805-13	SWITCH, TACTILE (WITH LED) (6/PAUSE)	(EXCEPT GT427UE)
LSW916	1-786-806-13	SWITCH, TACTILE (WITH LED) (6/PAUSE)	(GT427UE)
LSW917	1-786-805-13	SWITCH, TACTILE (WITH LED) (DSPL/SCRL)	(EXCEPT GT427UE)
LSW917	1-786-806-13	SWITCH, TACTILE (WITH LED) (DSPL/SCRL)	(GT427UE)
		< TRANSISTOR >	
Q801	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q931	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q932	6-551-444-01	TRANSISTOR RT1N436C-TP-1	
		< RESISTOR >	
R901	1-216-047-11	RES-CHIP 820 5%	1/10W
R902	1-216-821-11	METAL CHIP 1K 5%	1/10W
R903	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R904	1-216-824-11	METAL CHIP 1.8K 5%	1/10W
R905	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R906	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R907	1-216-821-11	METAL CHIP 1K 5%	1/10W
R908	1-216-822-11	METAL CHIP 1.2K 5%	1/10W
R909	1-216-820-11	METAL CHIP 820 5%	1/10W
R910	1-216-821-11	METAL CHIP 1K 5%	1/10W
R911	1-216-821-11	METAL CHIP 1K 5%	1/10W
R912	1-216-822-11	METAL CHIP 1.2K 5%	1/10W
R913	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R914	1-216-824-11	METAL CHIP 1.8K 5%	1/10W
R915	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R916	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R921	1-216-864-11	SHORT CHIP 0	
R922	1-216-864-11	SHORT CHIP 0	
R931	1-216-814-11	METAL CHIP 270 5%	1/10W
R932	1-216-814-11	METAL CHIP 270 5%	1/10W
R934	1-216-822-11	METAL CHIP 1.2K 5%	1/10W
R941	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R941	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R942	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)
R942	1-216-811-11	METAL CHIP 150 5%	1/10W (EXCEPT GT427UE)
R943	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R943	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R944	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)
R944	1-216-811-11	METAL CHIP 150 5%	1/10W (EXCEPT GT427UE)
R945	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R945	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R946	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)
R946	1-216-811-11	METAL CHIP 150 5%	1/10W (EXCEPT GT427UE)
R947	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R947	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R948	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)
R948	1-216-811-11	METAL CHIP 150 5%	1/10W (EXCEPT GT427UE)
R949	1-216-807-11	METAL CHIP 68 5%	1/10W (GT427UE)
R949	1-216-809-11	METAL CHIP 100 5%	1/10W (EXCEPT GT427UE)
R950	1-216-807-11	METAL CHIP 68 5%	1/10W (GT427UE)
R950	1-216-809-11	METAL CHIP 100 5%	1/10W (EXCEPT GT427UE)
R951	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R951	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R952	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)
R952	1-216-811-11	METAL CHIP 150 5%	1/10W (EXCEPT GT427UE)
R953	1-216-811-11	METAL CHIP 150 5%	1/10W (GT427UE)
R953	1-216-812-11	METAL CHIP 180 5%	1/10W (EXCEPT GT427UE)
R954	1-216-810-11	METAL CHIP 120 5%	1/10W (GT427UE)

Ref. No.	Part No.	Description			Remark
R954	1-216-811-11	METAL CHIP	150	5%	1/10W (EXCEPT GT427UE)
R955	1-216-811-11	METAL CHIP	150	5%	1/10W (GT427UE)
R955	1-216-812-11	METAL CHIP	180	5%	1/10W (EXCEPT GT427UE)
R956	1-216-810-11	METAL CHIP	120	5%	1/10W (GT427UE)
R956	1-216-811-11	METAL CHIP	150	5%	1/10W (EXCEPT GT427UE)
R971	1-216-807-11	METAL CHIP	68	5%	1/10W (GT427UE)
R971	1-216-809-11	METAL CHIP	100	5%	1/10W (EXCEPT GT427UE)
R972	1-216-807-11	METAL CHIP	68	5%	1/10W (GT427UE)
R972	1-216-809-11	METAL CHIP	100	5%	1/10W (EXCEPT GT427UE)
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R977	1-216-809-11	METAL CHIP	100	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-811-11	METAL CHIP	150	5%	1/10W
R982	1-216-811-11	METAL CHIP	150	5%	1/10W
R984	1-216-821-11	METAL CHIP	1K	5%	1/10W
R985	1-216-821-11	METAL CHIP	1K	5%	1/10W
R986	1-216-821-11	METAL CHIP	1K	5%	1/10W
R987	1-216-857-11	METAL CHIP	1M	5%	1/10W
R992	1-469-876-11	INDUCTOR, FERRITE BEAD			
		< NETWORK RESISTOR >			
RB901	1-239-662-81	RESISTOR, NETWORK 10X2			
		< ROTARY ENCODER >			
RE901	1-479-902-21	ENCODER, ROTARY (PUSH ENTER/SELECT/VOLUME)			
		< SWITCH >			
S901	1-786-653-21	SWITCH, TACTILE (⏏)			
S902	1-786-653-21	SWITCH, TACTILE (OFF)			
S903	1-786-653-21	SWITCH, TACTILE (SOURCE)			
S904	1-786-653-21	SWITCH, TACTILE (MODE)			
S905	1-786-653-21	SWITCH, TACTILE (BROWSE)			
S906	1-786-653-21	SWITCH, TACTILE (BACK)			
**********					
	A-1363-643-A	MAIN BOARD, COMPLETE (GT420U:AEP,UK,RU/GT424U)			
	A-1366-526-A	MAIN BOARD, COMPLETE (GT470U:E,IND/GT470US)			
	A-1367-679-A	MAIN BOARD, COMPLETE (GT427UE)			
	A-1367-703-A	MAIN BOARD, COMPLETE (GT420U:US)			
	A-1368-026-A	MAIN BOARD, COMPLETE (GT470U:EA)			
		**********			
	7-621-284-40	SCREW +P 2.6X10			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-126-963-11	ELECT	4.7uF	20%	50V (AEP,UK,RU)

Ref. No.	Part No.	Description			Remark
C2	1-126-947-11	ELECT	47uF	20%	35V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C5	1-126-947-11	ELECT	47uF	20%	35V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C7	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C10	1-162-923-11	CERAMIC CHIP	47PF	5%	50V (AEP,UK,RU)
C11	1-162-923-11	CERAMIC CHIP	47PF	5%	50V (AEP,UK,RU)
C15	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (EXCEPT AEP,UK,RU)
C50	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C51	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C52	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK,RU)
C56	1-164-237-11	CERAMIC CHIP	16PF	5%	50V (AEP,UK,RU)
C57	1-164-237-11	CERAMIC CHIP	16PF	5%	50V (AEP,UK,RU)
C58	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (AEP,UK,RU)
C60	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (AEP,UK,RU)
C61	1-126-947-11	ELECT	47uF	20%	35V (AEP,UK,RU)
C151	1-126-960-11	ELECT	1uF	20%	50V
C152	1-126-960-11	ELECT	1uF	20%	50V
C153	1-126-961-11	ELECT	2.2uF	20%	50V
C154	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C155	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C301	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C303	1-128-551-11	ELECT	22uF	20%	63V
C304	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C306	1-124-233-11	ELECT	10uF	20%	16V
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C308	1-124-233-11	ELECT	10uF	20%	16V
C309	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C312	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C313	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C314	1-124-233-11	ELECT	10uF	20%	16V
C315	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C316	1-124-233-11	ELECT	10uF	20%	16V
C317	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C318	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C319	1-216-864-11	SHORT CHIP	0		
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C325	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C330	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C361	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C362	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C363	1-124-257-00	ELECT	2.2uF	20%	50V
C364	1-124-257-00	ELECT	2.2uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C401	1-124-234-00	ELECT	22uF	20%	16V
C402	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C403	1-124-584-00	ELECT	100uF	20%	10V
C406	1-124-257-00	ELECT	2.2uF	20%	50V
C407	1-124-257-00	ELECT	2.2uF	20%	50V
C409	1-124-233-11	ELECT	10uF	20%	16V
C412	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C418	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C419	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C421	1-126-964-11	ELECT	10uF	20%	50V
C423	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C424	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C426	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C431	1-124-233-11	ELECT	10uF	20%	16V
C432	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C434	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C441	1-126-964-11	ELECT	10uF	20%	50V
C443	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C444	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C445	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C451	1-124-233-11	ELECT	10uF	20%	16V
C452	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C454	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C461	1-126-964-11	ELECT	10uF	20%	50V
C462	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C463	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C471	1-126-964-11	ELECT	10uF	20%	50V
C472	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C473	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C484	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C485	1-104-665-11	ELECT	100uF	20%	25V
C486	1-124-233-11	ELECT	10uF	20%	16V
C491	1-124-589-11	ELECT	47uF	20%	16V
C493	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C494	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C501	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C502	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C503	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C504	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C505	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C506	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C507	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C508	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C511	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
				(GT470U/GT470US)	
C515	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
				(GT470U/GT470US)	
C516	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C600	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C623	1-126-926-11	ELECT	1000uF	20%	10V
C624	1-126-926-11	ELECT	1000uF	20%	10V
C681	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C682	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C683	1-124-584-00	ELECT	100uF	20%	10V
C701	1-112-302-11	ELECT	3300uF	20%	16V

Ref. No.	Part No.	Description			Remark
C702	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C703	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C704	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C705	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C706	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C707	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C808	1-100-352-11	CERAMIC CHIP	1uF	20%	16V
C809	1-165-727-31	ELECT	120uF	20%	16V
C810	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C811	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C812	1-100-352-11	CERAMIC CHIP	1uF	20%	16V
C813	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C814	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C816	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C817	1-126-924-11	ELECT	330uF	20%	10V
C818	1-126-933-11	ELECT	100uF	20%	16V
C819	1-104-665-11	ELECT	100uF	20%	25V
C822	1-104-665-11	ELECT	100uF	20%	25V
C823	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C824	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C826	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C827	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C832	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C853	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C953	1-216-864-11	SHORT CHIP	0 (EXCEPT GT427UE)		
C999	1-216-864-11	SHORT CHIP	0		
		< CONNECTOR >			
CN300	1-774-701-21	PIN, CONNECTOR 16P			
CN350	1-820-611-11	CONNECTOR, BOARD TO BOARD 28P			
CN352	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CN370	1-820-622-12	SOCKET, CONNECTOR 20P			
		< DIODE >			
D2	6-501-734-01	DIODE	MAZ8056GMLS0		
D101	6-501-193-01	DIODE	1SS355WTE-17		
D102	6-501-193-01	DIODE	1SS355WTE-17		
D103	6-501-743-01	DIODE	MAZ8068GMLS0		
D104	6-501-743-01	DIODE	MAZ8068GMLS0		
D105	6-501-170-01	DIODE	UDZW-TE17-6.8B (EXCEPT GT420U:AEP,UK,RU/GT424U)		
D105	8-719-978-33	DIODE	DTZ-TT11-6.8B (GT420U:AEP,UK,RU/GT424U)		
D106	6-501-743-01	DIODE	MAZ8068GMLS0		
D107	6-501-743-01	DIODE	MAZ8068GMLS0		
D108	6-501-743-01	DIODE	MAZ8068GMLS0		
D109	6-501-743-01	DIODE	MAZ8068GMLS0		
D110	6-501-743-01	DIODE	MAZ8068GMLS0		
D111	6-501-743-01	DIODE	MAZ8068GMLS0		
D112	6-501-743-01	DIODE	MAZ8068GMLS0		
D113	6-501-743-01	DIODE	MAZ8068GMLS0		
D151	1-805-043-11	ABSORBER, CHIP SURGE			
D152	1-805-043-11	ABSORBER, CHIP SURGE			
D153	6-501-782-01	DIODE	MAZ8180GMLS0		
D156	6-501-170-01	DIODE	UDZW-TE17-6.8B (EXCEPT GT420U:AEP,UK,RU/GT424U)		
D156	8-719-978-33	DIODE	DTZ-TT11-6.8B (GT420U:AEP,UK,RU/GT424U)		
D301	6-501-362-01	DIODE	1A4-TA26		
D302	6-501-362-01	DIODE	1A4-TA26		
D303	6-501-362-01	DIODE	1A4-TA26		

Ref. No.	Part No.	Description	Remark
D304	6-501-362-01	DIODE 1A4-TA26	
D305	6-501-362-01	DIODE 1A4-TA26	
D306	6-501-362-01	DIODE 1A4-TA26	
D307	6-501-362-01	DIODE 1A4-TA26	
D308	6-501-362-01	DIODE 1A4-TA26	
D309	6-501-362-01	DIODE 1A4-TA26	
D310	6-501-362-01	DIODE 1A4-TA26	
D311	6-501-362-01	DIODE 1A4-TA26	
D312	6-501-362-01	DIODE 1A4-TA26	
D353	6-501-656-01	DIODE LBAT54ALT1G	
D491	6-501-193-01	DIODE 1SS355WTE-17	
D501	6-502-131-01	DIODE LRB751V-40T1G	
D602	6-501-782-01	DIODE MAZ8180GMLS0	
D603	6-501-747-01	DIODE MAZ8075GMLS0	
D607	6-501-571-01	DIODE 1N5404-C311-3	
D702	6-501-782-01	DIODE MAZ8180GMLS0	
D704	6-501-782-01	DIODE MAZ8180GMLS0 (AEP,UK,RU)	
D706	6-501-782-01	DIODE MAZ8180GMLS0	
D707	6-501-782-01	DIODE MAZ8180GMLS0	
D802	6-501-657-01	DIODE MA24D5000BS0	
D803	6-501-768-01	DIODE MAZ8120GMLS0	
D805	6-501-193-01	DIODE 1SS355WTE-17	
D807	6-501-734-01	DIODE MAZ8056GMLS0	
		< IC >	
IC50	6-803-747-01	IC TDA7333013TR (AEP,UK,RU)	
IC300	6-705-359-02	IC TDA8588AJ/N2/R1 (EXCEPT GT420U:AEP,UK,RU/GT424U)	
IC300	6-705-359-11	IC TDA8588AJ/N2/R1/M5 (GT420U:AEP,UK,RU/GT424U)	
IC401	6-710-065-01	IC BD3442FS-E2	
IC501	6-807-865-01	IC M3062LFGP-050FP (EXCEPT GT427UE)	
IC501	6-807-865-02	IC M3062LFGP-053FP (GT427UE)	
IC602	6-709-458-01	IC XC61CN2802NR	
IC681	6-711-653-01	IC S-1206B33-U3T1G	
IC803	6-710-965-01	IC TPS40200DRG4	
IC804	6-710-624-01	IC TPS2051BDRG4	
IC805	8-759-586-19	IC TC7WH123FU(TE12R)	
		< JACK >	
J1	1-815-185-13	JACK (ANTENNA)	
J370	1-566-822-41	JACK (REMOTE IN)	
J652	1-774-698-11	JACK, PIN 2P (AUDIO OUT REAR)	
		< JUMPER RESISTOR >	
JC1	1-216-296-11	SHORT CHIP 0	
JC28	1-216-864-11	SHORT CHIP 0	
JC29	1-216-296-11	SHORT CHIP 0	
JC30	1-216-296-11	SHORT CHIP 0	
JC31	1-216-296-11	SHORT CHIP 0	
JC400	1-216-296-11	SHORT CHIP 0	
JC410	1-216-296-11	SHORT CHIP 0	
JC411	1-216-296-11	SHORT CHIP 0	
JC412	1-216-296-11	SHORT CHIP 0	
JC413	1-216-296-11	SHORT CHIP 0	
JC440	1-216-296-11	SHORT CHIP 0	
JC490	1-216-296-11	SHORT CHIP 0	
JC491	1-216-296-11	SHORT CHIP 0	
JC500	1-216-296-11	SHORT CHIP 0	
JC501	1-216-296-11	SHORT CHIP 0	
JC502	1-216-296-11	SHORT CHIP 0	
JC503	1-216-296-11	SHORT CHIP 0	
JC504	1-216-296-11	SHORT CHIP 0	
JC506	1-216-296-11	SHORT CHIP 0	
JC507	1-216-296-11	SHORT CHIP 0	
JC700	1-216-296-11	SHORT CHIP 0	
		< COIL >	
L2	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP,UK,RU)	
L3	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP,UK,RU)	
L4	1-216-295-11	SHORT CHIP 0	
L5	1-469-844-11	INDUCTOR 2.2uH	
L50	1-216-864-11	SHORT CHIP 0 (AEP,UK,RU)	
L151	1-216-295-11	SHORT CHIP 0	
L300	1-456-617-11	COIL, CHOKE	
L370	1-469-876-11	INDUCTOR, FERRITE BEAD	
L401	1-469-876-11	INDUCTOR, FERRITE BEAD	
L405	1-469-876-11	INDUCTOR, FERRITE BEAD	
L406	1-500-245-11	INDUCTOR, FERRITE BEAD	
L407	1-469-876-11	INDUCTOR, FERRITE BEAD	
L409	1-469-844-11	INDUCTOR 2.2uH	
L410	1-469-876-11	INDUCTOR, FERRITE BEAD	
L450	1-414-595-11	INDUCTOR, FERRITE BEAD	
L701	1-469-876-11	INDUCTOR, FERRITE BEAD	
L801	1-411-595-21	COIL, CHOKE 47uH	
L802	1-406-718-21	COIL, CHOKE 68uH	
L803	1-412-525-31	INDUCTOR 10uH	
L805	1-216-295-11	SHORT CHIP 0	
L901	1-216-295-11	SHORT CHIP 0	
L902	1-469-844-11	INDUCTOR 2.2uH	
		< TRANSISTOR >	
Q1	8-729-027-43	TRANSISTOR DTC114EKA-T146 (AEP,UK,RU)	
Q3	6-551-431-01	TRANSISTOR 2SC6027T100-QR	
Q50	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF (AEP,UK,RU)	
Q51	8-729-027-43	TRANSISTOR DTC114EKA-T146 (AEP,UK,RU)	
Q401	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q402	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q411	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q412	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q420	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q432	6-551-863-01	TRANSISTOR RTAN140C-T112A-1	
Q440	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q452	6-551-863-01	TRANSISTOR RTAN140C-T112A-1	
Q460	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q470	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q491	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q492	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q601	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q602	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q605	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q701	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF (AEP,UK,RU)	
Q702	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q806	6-550-828-01	TRANSISTOR RSQ035P03TR	
Q807	6-551-923-01	TRANSISTOR TPC6108(T5RSONYF,M	
Q808	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q809	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q810	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q811	6-551-923-01	TRANSISTOR TPC6108(T5RSONYF,M	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R1	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP,UK,RU)
R2	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3	1-216-843-11	METAL CHIP	68K	5%	1/10W
R4	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5	1-216-843-11	METAL CHIP	68K	5%	1/10W
R8	1-216-839-11	METAL CHIP	33K	5%	1/10W (AEP,UK,RU)
R9	1-216-843-11	METAL CHIP	68K	5%	1/10W
R10	1-216-821-11	METAL CHIP	1K	5%	1/10W
R12	1-216-864-11	SHORT CHIP	0		
R13	1-216-864-11	SHORT CHIP	0		
R15	1-216-864-11	SHORT CHIP	0 (AEP,UK,RU)		
R52	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP,UK,RU)
R53	1-216-797-11	METAL CHIP	10	5%	1/10W (AEP,UK,RU)
R54	1-414-595-11	INDUCTOR, FERRITE BEAD (AEP,UK,RU)			
R55	1-414-595-11	INDUCTOR, FERRITE BEAD (AEP,UK,RU)			
R57	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK,RU)
R58	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK,RU)
R60	1-216-864-11	SHORT CHIP	0 (AEP,UK,RU)		
R61	1-216-864-11	SHORT CHIP	0		
R107	1-216-864-11	SHORT CHIP	0		
R151	1-216-817-11	METAL CHIP	470	5%	1/10W
R152	1-216-817-11	METAL CHIP	470	5%	1/10W
R153	1-216-834-11	METAL CHIP	12K	5%	1/10W
R154	1-216-834-11	METAL CHIP	12K	5%	1/10W
R155	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R156	1-216-864-11	SHORT CHIP	0		
R157	1-216-864-11	SHORT CHIP	0		
R301	1-216-811-11	METAL CHIP	150	5%	1/10W
R302	1-216-841-11	METAL CHIP	47K	5%	1/10W
R303	1-216-864-11	SHORT CHIP	0		
R350	1-216-864-11	SHORT CHIP	0		
R351	1-216-845-11	METAL CHIP	100K	5%	1/10W
R370	1-414-595-11	INDUCTOR, FERRITE BEAD			
R371	1-414-595-11	INDUCTOR, FERRITE BEAD			
R401	1-216-817-11	METAL CHIP	470	5%	1/10W
R402	1-216-817-11	METAL CHIP	470	5%	1/10W
R403	1-216-837-11	METAL CHIP	22K	5%	1/10W
R404	1-216-837-11	METAL CHIP	22K	5%	1/10W
R405	1-216-845-11	METAL CHIP	100K	5%	1/10W
R412	1-216-864-11	SHORT CHIP	0		
R421	1-216-821-11	METAL CHIP	1K	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-821-11	METAL CHIP	1K	5%	1/10W
R447	1-216-833-11	METAL CHIP	10K	5%	1/10W
R448	1-216-833-11	METAL CHIP	10K	5%	1/10W
R449	1-216-833-11	METAL CHIP	10K	5%	1/10W
R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-821-11	METAL CHIP	1K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-864-11	SHORT CHIP	0		
R471	1-216-821-11	METAL CHIP	1K	5%	1/10W
R472	1-216-833-11	METAL CHIP	10K	5%	1/10W
R473	1-216-864-11	SHORT CHIP	0		
R485	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R491	1-216-805-11	METAL CHIP	47	5%	1/10W
R501	1-216-845-11	METAL CHIP	100K	5%	1/10W
R502	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R503	1-216-845-11	METAL CHIP	100K	5%	1/10W
R504	1-216-864-11	SHORT CHIP	0		
R505	1-216-849-11	METAL CHIP	220K	5%	1/10W
R507	1-216-809-11	METAL CHIP	100	5%	1/10W
R508	1-216-845-11	METAL CHIP	100K	5%	1/10W
R509	1-216-809-11	METAL CHIP	100	5%	1/10W
R510	1-216-809-11	METAL CHIP	100	5%	1/10W
R511	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R512	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R513	1-216-845-11	METAL CHIP	100K	5%	1/10W
R515	1-216-845-11	METAL CHIP	100K	5%	1/10W
R517	1-216-809-11	METAL CHIP	100	5%	1/10W
R518	1-216-845-11	METAL CHIP	100K	5%	1/10W
R519	1-216-809-11	METAL CHIP	100	5%	1/10W
R522	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT AEP,UK,RU)
R523	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP,UK,RU)
R524	1-216-845-11	METAL CHIP	100K	5%	1/10W
R531	1-216-845-11	METAL CHIP	100K	5%	1/10W
R532	1-216-833-11	METAL CHIP	10K	5%	1/10W
R534	1-216-845-11	METAL CHIP	100K	5%	1/10W
R535	1-216-845-11	METAL CHIP	100K	5%	1/10W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT470U/GT470US)
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT420U/GT424U/GT427UE)
R539	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT427UE)
R540	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT420U/GT424U/GT470U:EA)
R541	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT420U:US/GT427UE)
R542	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT GT420U:US/GT427UE)
R543	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP,UK,RU)
R544	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT AEP,UK,RU)
R545	1-216-845-11	METAL CHIP	100K	5%	1/10W (E,IND,MX)
R547	1-216-817-11	METAL CHIP	470	5%	1/10W
R548	1-216-817-11	METAL CHIP	470	5%	1/10W
R549	1-216-817-11	METAL CHIP	470	5%	1/10W
R550	1-216-809-11	METAL CHIP	100	5%	1/10W
R551	1-216-809-11	METAL CHIP	100	5%	1/10W
R552	1-216-833-11	METAL CHIP	10K	5%	1/10W
R553	1-216-833-11	METAL CHIP	10K	5%	1/10W
R554	1-216-809-11	METAL CHIP	100	5%	1/10W
R555	1-216-845-11	METAL CHIP	100K	5%	1/10W (GT427UE)
R557	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT GT427UE)
R558	1-216-833-11	METAL CHIP	10K	5%	1/10W
R559	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R560	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R561	1-218-871-11	METAL CHIP	10K	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
R562	1-216-845-11	METAL CHIP	100K	5%	1/10W
R564	1-216-845-11	METAL CHIP	100K	5%	1/10W
R565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R566	1-216-809-11	METAL CHIP	100	5%	1/10W
R567	1-216-809-11	METAL CHIP	100	5%	1/10W
R600	1-216-845-11	METAL CHIP	100K	5%	1/10W
R601	1-216-849-11	METAL CHIP	220K	5%	1/10W
R603	1-216-821-11	METAL CHIP	1K	5%	1/10W
R604	1-216-821-11	METAL CHIP	1K	5%	1/10W
R680	1-216-864-11	SHORT CHIP	0		
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK,RU)
R702	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP,UK,RU)
R703	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK,RU)
R704	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK,RU)
R705	1-249-425-11	CARBON	4.7K	5%	1/4W
R706	1-216-841-11	METAL CHIP	47K	5%	1/10W
R707	1-216-841-11	METAL CHIP	47K	5%	1/10W
R708	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R822	1-216-864-11	SHORT CHIP	0		
R823	1-216-296-11	SHORT CHIP	0		
R824	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R825	1-216-864-11	SHORT CHIP	0		
R826	1-216-845-11	METAL CHIP	100K	5%	1/10W
R827	1-216-851-11	METAL CHIP	330K	5%	1/10W
R828	1-216-843-11	METAL CHIP	68K	5%	1/10W
R829	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R830	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R831	1-218-885-11	METAL CHIP	39K	0.5%	1/10W
R832	1-216-821-11	METAL CHIP	1K	5%	1/10W
R833	1-216-821-11	METAL CHIP	1K	5%	1/10W
R834	1-216-821-11	METAL CHIP	1K	5%	1/10W
R837	1-216-821-11	METAL CHIP	1K	5%	1/10W
R838	1-216-821-11	METAL CHIP	1K	5%	1/10W
R840	1-216-864-11	SHORT CHIP	0		
R841	1-216-833-11	METAL CHIP	10K	5%	1/10W
R842	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R843	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R844	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R845	1-216-842-11	METAL CHIP	56K	5%	1/10W
R846	1-216-833-11	METAL CHIP	10K	5%	1/10W
R847	1-216-296-11	SHORT CHIP	0		
R848	1-216-842-11	METAL CHIP	56K	5%	1/10W
R849	1-216-842-11	METAL CHIP	56K	5%	1/10W
R851	1-216-833-11	METAL CHIP	10K	5%	1/10W
R852	1-216-833-11	METAL CHIP	10K	5%	1/10W
R853	1-576-416-21	FUSE, MICRO (1608 TYPE) 2A			
R902	1-216-809-11	METAL CHIP	100	5%	1/10W
R903	1-216-809-11	METAL CHIP	100	5%	1/10W
R904	1-216-809-11	METAL CHIP	100	5%	1/10W
R905	1-216-845-11	METAL CHIP	100K	5%	1/10W
R951	1-216-797-11	METAL CHIP	10	5%	1/10W
R952	1-216-797-11	METAL CHIP	10	5%	1/10W
R999	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S103	1-786-826-11	SWITCH, TACTILE (RESET)			
S501	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECTOR)			(E,IND,MX)
		< TUNER UNIT >			
TU1	A-3220-960-B	TUNER UNIT (TUX-032)			(GT470U/GT470US)
TU1	A-3220-961-B	TUNER UNIT (TUX-032)			(GT420U/GT424U/GT427UE)
		< VIBRATOR >			
X50	1-813-173-11	VIBRATOR, CRYSTAL (8.664MHz) (AEP,UK,RU)			
X501	1-814-075-21	VIBRATOR, CERAMIC (11.06MHz)			(GT420U/GT424U/GT427UE)
X501	1-814-081-11	VIBRATOR, CRYSTAL (11.06MHz)			(GT470U/GT470US)
X502	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
	A-1362-921-A	SERVO BOARD, COMPLETE			
		**********			
**********					
		MISCELLANEOUS			
		**********			
7	1-831-838-11	CORD (WITH CONNECTOR) (ISO) (POWER)			(AEP,UK,RU)
7	1-833-762-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (for Maruti Suzuki:Gasoline Car)			
7	1-833-974-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (EXCEPT AEP,UK,RU)			
7	1-834-307-11	CONNECTION CORD FOR AUTOMOBILE (POWER) (for Maruti Suzuki:Diesel Car)			
⚠ 103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
**********					
		ACCESSORIES			
		**********			
	1-479-077-13	REMOTE COMMANDER (RM-X151)			
	2-548-729-01	LID, BATTERY CASE (for RM-X151)			
	3-275-367-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH)			(US)
	3-275-367-21	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	3-275-367-31	MANUAL, INSTRUCTION (RUSSIAN,UKRAINIAN)			(RU)
	3-275-367-41	MANUAL, INSTRUCTION (ENGLISH,SPANISH, PERSIAN) (E,IND,MX)			
	3-275-367-61	MANUAL, INSTRUCTION (ENGLISH,ARABIC)			(EA)
	3-275-443-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US)			
	3-275-443-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH) (AEP,UK)			
	3-275-443-31	MANUAL, INSTRUCTION, INSTALL (RUSSIAN, UKRAINIAN) (RU)			
	3-275-443-41	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,PERSIAN) (E,IND,MX)			
	3-275-443-61	MANUAL, INSTRUCTION, INSTALL (ENGLISH, ARABIC) (EA)			
	X-2176-322-1	CAP (USB) ASSY			
	X-2187-544-1	CASE ASSY (for FRONT PANEL) (EXCEPT US)			
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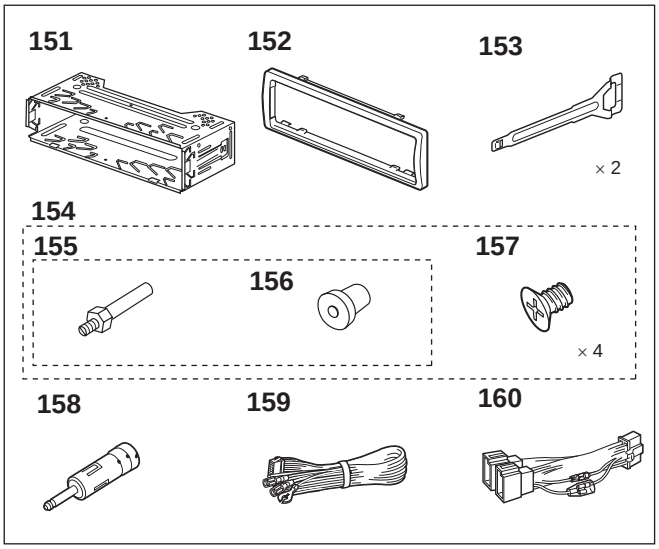
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS **********	
151	X-2179-431-1	FRAME ASSY, FITTING	
152	2-686-803-11	COLLAR	
152	3-255-785-02	COLLAR (1DIN) (for Maruti Suzuki)	
153	3-246-471-01	KEY (FRAME)	
154	X-3381-154-1	SCREW ASSY (BS4), FITTING	(GT470U/GT470US)
155	X-3382-926-1	SCREW ASSY (BS), FITTING (AEP,UK,RU)	
156	3-349-410-11	BUSHING (EXCEPT US)	
157	3-934-325-01	SCREW, +K (5X8) TAPPING	(EXCEPT AEP,UK,RU)
158	1-465-459-31	ADAPTOR, ANTENNA (AEP,UK,RU)	
159	1-833-974-11	CONNECTION CORD FOR AUTOMOBILE	(POWER) (EXCEPT AEP,UK,RU)
160	1-831-838-11	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK,RU)
160	1-833-762-11	CONNECTION CORD FOR AUTOMOBILE	(POWER) (for Maruti Suzuki:Gasoline Car)
160	1-834-307-11	CONNECTION CORD FOR AUTOMOBILE	(POWER) (for Maruti Suzuki:Diesel Car)



MEMO

REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2007.11	New
1.1	2008.01	Maruti Suzuki model addition of CDX-GT470US (Indian Model). Deletion of CDX-GT47U (Chinese model). IC501 Change of CDX-GT427UE. (SPM-07010)